

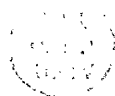
THE IDENTIFICATION OF ADOPTIVES
IN MATENGO;
WITH SPECIAL REFERENCE TO ADOPTIVES
FROM
INTRA-BANTU SOURCES

by
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DEDICATION

To My Father Alois Turuka,
My Mother Anna Kinunda,
My Wife Theofrida Blasius and Our 'Great' Sons:
Charles Holangope and
Frederick Mahengu

* * * * *

ABSTRACT

This study is concerned with the process of linguistic adoption, in particular the setting up of techniques that can be used to identify adopted material (adoptives) within Bantu languages and especially adoptives that result from the mutual interpenetration of Bantu languages.

A model of identification has been set up principally by applying Guthrie's comparative techniques and results to Matengo (N13), a Bantu language spoken in Southern Tanzania. After a background description to the languages involved here and a brief treatment of some of the theories generally held on Lexical Borrowing, in which Swahili loans of non-Bantu provenance have mostly been employed, regular and irregular (skewed) reflexes of Common Bantu 'starred' forms in Matengo have been abstracted, and the skewed reflexes examined to determine whether or not the forms involved are loan suspects. When the irregular reflexes contain extraneous phonological features, whether segmental (Chapter 3) or tonal (Chapter 5), and especially if a possible source language for the skewing or extraneousness can be found, then our suspicion regarding loaning is strengthened. The languages employed in this study as examples of those from which Matengo might have adopted part of its Bantu material are Manda (N11) and Ngoni (N12), close linguistic associates of Matengo, and Standard Swahili (here distinguished from Ki-Unguja - G42d) which has had significant contact with Matengo.

The identification methodology developed in this study has also been tested on material unrelated to Common Bantu (Chapter 4) and some putative adoptives of intra-Bantu source have been detected in such material. In this connection, only the segmental features have been taken into account, since the tonal typologies of Common Eastern Nyasa (*EN) have not been worked out.

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OTHERS

My thanks are also due to Mr. E. Kihwili, who was the sole source of the Ngoni data used in this thesis, and to my great friend, Gislar Haule, my main consultant for Manda. Their love and knowledge of their 'first languages' were matched only by their patience and enthusiasm in helping me to record part of their linguistic intuition. I am most grateful to both for their important contribution to my work.

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ORTHOGRAPHY

Of the orthographic characters used for the Bantu languages covered in this research, the following need special explanation. Below, each of these symbols is placed side by side with its phonetic counterpart:

<u>Orthographic Symbol Used</u>	<u>Phonetic Counterpart</u>
v (in Manda and Ngoni)	[ʌ]
ch	[tʃ]
gh	[ɣ]
ŋ (also 'ng' in Swahili)	[ŋ]
ny or ɲ	[ɲ]
sh or ʃ	[ʃ]
j	[dʒ]
y	[j]
e	[ɛ]
ei	[ei] and [e]
a	[a] and [ɑ]
o	[ɔ]
ou	[ou] and [o]

The rest of the orthographic characters used in this work assume the shapes in which their phonetic equivalents appear in the majority of current transcriptions. There is a one-to-one correlation between the two sets of symbols:

<u>Orthographic Symbol Used</u>	<u>Phonetic Counterpart</u>
b	[b]
p	[p]
d	[d]
t	[t]
g	[g]
k	[k]

<u>Orthographic Symbol Used</u>	<u>Phonetic Counterpart</u>
v	[v]
f	[f]
z	[z]
s	[s]
r	[r]
l	[l]
w	[w]
m	[m]
n	[n]
i	[i]
u	[u]

ADDITIONAL SYMBOLS, DIACRITICS AND ABBREVIATIONS

C	Syllabic Consonant
\tilde{C} or \tilde{V}	Nasalised Consonant or Nasalised Vowel
C_1, C_2, \dots	Initial Consonant, Second Consonant, etc.
V_1, V_2, \dots	Initial Vowel, Second Vowel, etc.
/____	Specification of Environment (Phonetic, Phonological, Morphological, etc.)
/ /	Phonological Unit
[]	Phonetic Unit or Skewed Reflex (in Appendix I)
[/]	Skewed Reflex (in the text, in this Thesis only)
{ }	Morphological Unit
\tilde{a} (or h)	High Tone
a (or l)	Low Tone
\hat{a} (or f)	Falling Tone
\check{a} (or r)	Rising Tone

#_____	Initial Environment
_____##	Final Environment
∨_____	Inter-vocalic Environment
*	indicates a following starred form
**	indicates an unattested form in a language (used in this work only in order to distinguish skewed forms from unattested forms)
[* --]	Valid shape would be (in Appendix I)
()	Skewed meaning (in Appendix I)
*X → Y	Y is the reflex of starred *X
	*X has as its reflex Y
A ↔ B	A in one language corresponds with B in another language (used normally to refer to cognates in sister/daughter languages)
X ~ Y	X is in free variation with Y X alternates freely with Y
→	become(s)/change(s) to, is/are realised as (in Morphological description)
X < Y	X is derived from Y (in Morphological description)
➤	indicates 'Mutation', i.e. irregular development of a form
CB	Common Bantu
CpB	Comparative Bantu
EN	Eastern Nyasa (as in <u>EN languages</u> , *EN)
*X	Starred X (an hypothetical construct X in CB)
EN *X	Starred X in Common EN inventory
C.S., p.s.	Comparative Series, Partial Series in CB
SP	Special Meaning (in Appendix I)

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CHAPTER ONE

BACKGROUND INTRODUCTION TO MATENGO, MANDA, Ngoni AND SWAHILI

1.0. PREFACE

The main concern of this Chapter is to provide a background to the major languages treated in this thesis. Specifically an attempt is made to examine the phonological structure of Matengo (N13), aspects of its morphological composition and the socio-historical background to its speakers. It is against this linguistic and cultural account that the concept of linguistic borrowing in Matengo will be considered in the rest of this work.

The socio-historical information on Matengo speakers (1.3.) will be of great significance in the discussion on 'proven' loans made in Chapter 2, where it is shown that a foreign cultural impact on Matengo speakers has left them with a good number of lexical borrowings in their language. The way these items have been assimilated and may be identified is of relevance to this study as a whole as will be shown in that Chapter (Chapter 2).

The phonological, morphological and morphophonological account (1.1. & 1.2.) is most relevant to Chapters 3, 4 and 5, where phonological shapes of words are examined in order to determine whether or not the words in question should be assigned an indigenous or a loan status.

The three other languages looked into in this Chapter have only been very briefly examined. Two of them, Manda (N11) and Ngoni (N12), share close linguistic affinity with Matengo and I have referred to this language group as Eastern Nyasa (EN); the third, Standard Swahili, has a long

significant contact with Matengo speakers, indeed with the speakers of all the languages of Tanzania and Kenya. These three languages will be considered in Chapters 3, 4 and 5 as the major potential sources of adoptives in Matengo. A brief phonological and cultural introductory background to Manda, Ngoni and Swahili is consequently deemed necessary.

1.1. PHONOLOGY

1.1.1. VOWELS

1.1.1.1. SYMMETRICAL VOWEL SYSTEMS

Guthrie (1948 : 12) suggests that Bantu languages may be identified by the characteristic, among many others, of having a symmetrical vowel system : symmetry being defined by the presence of an odd number of vowels, including one low central vowel and an equal number of front (unrounded) and back (rounded) vowels. Typical variations of such a system include a nine-vowel system as in Tswana (S31a) spoken in Botswana and South Africa, and Sotho (S33) spoken in Lesotho; a seven-vowel system as in Gikuyu (E51, Kenya), Sukuma (F21, Tanzania), Mongo (C61, Zaire) as well as Matengo (N13), Manda (N11) and Mpoto (N14) spoken in Tanzania; and a five-vowel system as in Ngoni (N12, Tanzania), Luguru (G35, Tanzania) and Standard Swahili (Tanzania, Kenya, etc.). Welmers (1973 : 21) observes that "... while symmetry in phonetic systems is common all over the world, it is, of course, not universal", and provides examples of non-Bantu African languages which display vowel symmetry in their phonological structure, including Nupe (5 vowels), Yoruba (7 vowels) and the Fante dialect of Akan (9 vowels). Matengo and Manda however, among the languages considered here, depart from the classical pattern of symmetrical seven-vowel systems in that they have a system of two diphthongs and five monophthongs rather than seven peripheral vowels.

1.1.1.2. MATENGO VOWEL SYSTEM

1.1.1.2.1. VOWEL INVENTORY

As indicated in the preceding section, the Matengo vowel system includes the diphthongs [ei] and [ou] which are in free variation with the half-close vowels [e] and [o], respectively. The following chart summarizes the symmetry in the Matengo system:

FRONT	CENTRAL	BACK
i		u
{ e ei }		{ o ou }
ɛ		ɔ
	a	

1.1.1.2.2. MATENGO VOWELS : MONOPHTHONGS AND DIPHTHONGS

Matengo speakers use seven vowels: five monophthongs and two diphthongs. These vowels may be observed in the following minimally contrasting septuplet:

[i]	kú-p <u>i</u> ta	to come out	: / i /
[ei]	kú-pe <u>i</u> ta	to pass, to excel	: / ei /
[ɛ]	kú-p <u>ɛ</u> ta	to winnow	: / ɛ /
[a]	kú-p <u>a</u> ta	to prune (of trees)	: / a /
[ɔ]	kú-po <u>ɔ</u> ta	to twine	: / o /
[ou]	kú-po <u>u</u> ta	to knock down	: / ou /
[u]	kú-put <u>u</u>	to erase, to rub off	: / u /

The diphthongs [ei] and [ou] are sometimes replaced by the half-close front vowel [e] and the half-close back vowel [o], respectively. In the usage of some speakers, including my own and my wife's, the diphthongs and the half-close vowels occur in free variation, i.e. unconditioned by any linguistic or extra-linguistic factors. With others², however, the shift from diphthongs to half-close vowels (and vice versa) is determined by such factors as the speed at which a word is uttered or the location of the sound in a word or its position in a sentence. When a word containing such sounds is, for example, uttered more slowly, as in the case of emphatic use of a word, diphthongs will tend to be employed; they are also most noticeable in the penultimate syllable in sentence final position. Otherwise half-close vowels are the more common realisation. However, it is significant to note that nowhere in the language is the opposition between the two sets of vowels functional: Matengo is undoubtedly a seven-vowel language like Manda, but unlike Ngoni or Swahili.

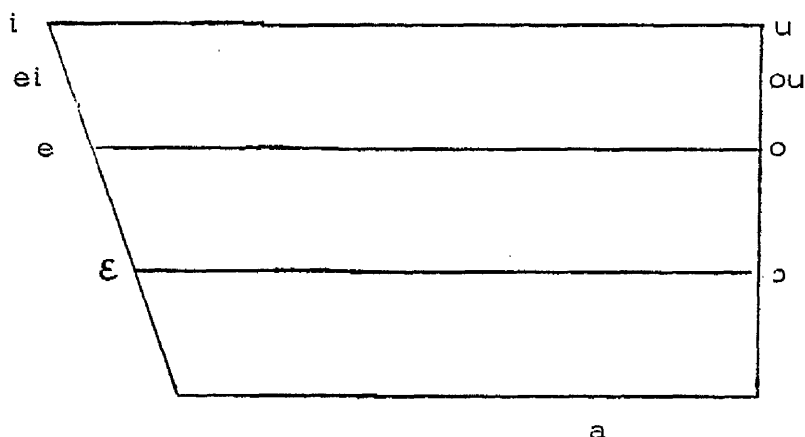
Monophthongs are usually phonetically short. Two of them may appear side by side as a result of juxtaposing syllables, as in:

naũle 'deliberately, on purpose'.

It will be shown further on below that two similar adjacent vowels of different syllables tend to produce a long vowel in quick speech. It will also be shown that, in penultimate position, monophthongs become phonetically long.

Below is a trapezium showing Matengo vowel sounds, in relation to the Cardinal Vowels. The description of each of these vowels is given in the following section.

Fig. I. Mätengo Vowels Plotted in the Cardinal Vowel Chart



1.1.1.2.3. PHONETIC DESCRIPTION

1. [i] close front vowel, as in
pípípí 'the whole day, throughout the day' adv.
kú-pílíl 'become dark / black'
2. [ei] closing diphthong similar to the English [ei] in [dei] 'day'
kú-peita 'to pass, to excel'
kú-leima 'to cultivate'
3. [ɛ] half-open front vowel
kú-jenda 'to walk, to go'
ú-kskɛ 'infancy, babyish behaviour'

Throughout this work, the orthographic symbol e will be used to represent this sound.

4. [a] open vowel lying between Cardinal 4 (open front vowel) and Cardinal 5 (open back vowel)
a-tâti 'father'
kú-baba 'to become bitter'
5. [ɔ] half-open back vowel
kú-bɔpɔla 'to untie'
li-gongɔlɔ 'millipede'

Throughout this work, the orthographic symbol o will be used to represent this sound.

6. [ou̯] closing diphthong with starting point close to Cardinal 7, i.e. unlike English /ou/ in 'boat' with its more central starting point

m-b[^]oumba 'woman'

kú-poula 'to pound (in a mortar with a pestle)'

7. [u̯] close back vowel

m[^]undu 'person, human being'

ú-luba 'crack (in a wall, utensil, etc.)'

1.1.1.2.4. LENGTHENING AND TONE

Vowel length in Matengo is not lexically significant as it is, for example, in Yao (P21) where -tu- 'cut in two' contrasts with -tu:l- 'put down' (Whiteley, 1963 :1). Vowels may be phonetically lengthened in penultimate position in the word, as in :

a-mbú:ja 'grandmother'

á-lá:mu 'brother / sister-in-law'

but

a-mbúja bítu 'our grandmother'

á-lamu bítu 'our brother / sister-in-law'.

The link between vowel length and tone is more fully treated in Chapter 5, where a detailed study is made of the Tone Classes of disyllabic nominals in Matengo. It is shown, in that chapter, that nominals in sentence final position, including those in isolation or citation form, display lengthened penultimate vowels and exhibit Falling and Rising as well as High and Low tones on these lengthened vowels. The choice between Falling, Rising, High and Low tones is determined in accordance with the Tone Class to which a particular nominal belongs. Penultimate length will not usually be marked in this work, but Rising and Falling tones will be indicated.

1.1.1.2.5. ASSIMILATION, CONTRACTION AND DESYLLABIFICATION

Assimilation and contraction of vowels result from the morphophonemic processes caused by the juxtaposition of two adjacent vowels of two different syllables, typically the final vowel of a grammatical morpheme such as the nominal prefix and the initial vowel of a stem or radical (lexical morpheme). The resulting forms show a reduction in syllabic composition, either eliding the first vowel if it is a or if the vowels are identical, or making the first vowel a semi-vowel glide. Desyllabification refers to this process of syllabic reduction. The main changes attested in Matengo include:

1. a \rightarrow \emptyset / V except where V = a .

i.e. a becomes zero when followed by a vowel,
unless the vowel in question is another a .

A sequence of two a's produces a long vowel.

Examples : ma + oumi \rightarrow m^oumi 'live'(Adj., Cl. 6)
 ma + inu \rightarrow mⁱnu 'teeth'
 ma + ana \rightarrow m^ana 'big children'

2. i \rightarrow y / V except where V = i

Examples : li + oumi \rightarrow ly^oumi 'live'(Adj., Cl. 5)
 li + ahi \rightarrow ly^ahi 'lots of blood'
 mi + ehi \rightarrow my^ehi 'months'
 mi + aka \rightarrow my^aka 'years'

3. u \rightarrow w / V except where V = u

Examples : mu + ana \rightarrow mw^ana 'child'
 lu + oumi \rightarrow lw^oumi 'live'(Adj., Cl. 11)
 mu + ihi \rightarrow mwⁱhi 'thief'
 gu + oha \rightarrow gw^oha 'whole' (Cl. 3)

1.1.1.2.6. VOWEL HARMONY

Westerman and Ward (1933 : 127) define Vowel Harmony as "...the principle which rules that vowels of neighbouring syllables shall have similarity with each other". In Matengo, certain verbal extensions for example have the termination -iC- for verb radicals with the fully-close and open vowels /i/, /u/ and /a/ in their first syllable, while radicals with half-open vowels /e/ and /o/ assume -eC- in such extensions, e.g. in the Applicative / Prepositional / Instrumental Extension:

kú- <u>t</u> imba	'to crush'	kú- <u>t</u> imbila	'to crush with / for'
kú- <u>t</u> ula	'to bend'	kú- <u>t</u> ulila	'to bend with / for'
kú- <u>j</u> anga	'to catch'	kú- <u>j</u> angila	'to catch with / for'

but:

kú- <u>t</u> ola	'to take away'	kú- <u>t</u> olela	'to take away with / for'
kú- <u>k</u> ema	'to call'	kú- <u>k</u> emela	'to call (with) / for'

Matengo verb radicals with half-close vowels or with diphthongs take on the closing front diphthong /ei/ (or the half-close front vowel with which this diphthong alternates) in the formation of such extensions, i.e. -eiC- or -eC-, as in :

kú- <u>l</u> eila	'to cry'	kú- <u>l</u> eileila	'to cry for'
kú- <u>l</u> eima	'to cultivate'	kú- <u>l</u> eimeila	'to cultivate with / for'
kú- <u>b</u> oumba	'to create/mould'	kú- <u>b</u> oumbeila	'to create/mould with/for'
kú- <u>b</u> oula	'to teach'	kú- <u>b</u> ouleila	'to teach with / for'

This relation of Vowel Harmony between the radical vowel and the extension vowel applies even in cases where there is an intervening open vowel, e.g.

kú- <u>p</u> ita	'to come out'	kú- <u>p</u> itanila	'to come out in a mass'
kú- <u>b</u> uja	'to go home'	kú- <u>b</u> ujanila	'to go home in a mass'
kú- <u>k</u> omana	'to fight'	kú- <u>k</u> omanela	'to fight for'
kú- <u>b</u> ouka	'to go away'	kú- <u>b</u> oukaneila	'to disperse'
kú- <u>l</u> einga	'to try on'	kú- <u>l</u> einganeila	'to become fitting'

Extensions with a back vowel are realised with /u/ except when the radical vowel and an extension vowel is /o/ or /ou/, where they are realised with /o/ or /ou/, respectively:

kú-p <u>u</u> nga	'to close'	kú-p <u>u</u> ng <u>u</u> la	'open'
kú-pe <u>u</u> ngeika	'to bar door'	kú-pe <u>u</u> ng <u>u</u> la	'to fell trees'
kú-lo <u>u</u> bela	'to become intoxicated'	kú-lo <u>u</u> bo <u>u</u> la	'to fish out'
kú-p <u>u</u> nga	'to arrange'	kú-p <u>u</u> ng <u>u</u> la	'to disarrange'
kú-h <u>u</u> ma	'to pierce'	kú-h <u>u</u> mo <u>u</u> la	'to extract'
kú-he <u>u</u> imba	'to dig'	kú-he <u>u</u> im <u>u</u> b <u>u</u> la	'to fling out earth'
kú-t <u>u</u> nga	'to string beads/ pierce/stick in'	kú-t <u>u</u> ng <u>u</u> o <u>u</u> la	'to pluck / pick fruit'

Apart from the verbal extensions, vowel harmony in Matengo is also noticeable in the alternations of the vowels in the preclitic {nA} 'and/with' and the possessive preclitic {-A} 'of', with its variant {-Aka} (employed before nouns of Class 2, see 1.2.7.1. below). Before disyllabic nouns {-A} in these elements is invariably realised as a, e.g.

<u>na</u>	bâna	'with children'
<u>na</u>	mwîhi	'with a thief'
<u>na</u>	němbu	'with scarifications / tatoos'
<u>na</u>	mwôju	'with the heart'
<u>na</u>	mûndu	'with a person'
<u>na</u>	lyôungu	'with a pumpkin'
<u>na</u>	pêingu	'with hand-cuffs'

Before poly-syllabic nominals, the realisation depends on the vowel of the following syllable:

{A} ---> i before (C)i, for example:

<u>ni</u>	lilâbi	'with a peanut'
<u>ní</u>	inoma	'with a drum'
<u>ní</u>	inzala	'with hunger / famine'

(úsoku) gwi kinzâtu '(the smallness) of the basket'

(lîhu) li kíhoubi '(the eye) of the leopard'

(ujânza) gwíki Kíngûsi '(the cunningness) of Kingusi

(nyûmba) jíki Kíganu '(the house) of Kiganu'

{A} ---> u before (C)u or before M (i.e. the syllabic nasal,
see 1.1.2.1.3., below),

for example:

nú uleili 'with a mat'
nu lúlimi 'with a tongue'
nú ngoji 'with a rope / string'
(ulâsu) gúku mbôumba '(the height) of the woman'
(upâna) gú uluba '(the width) of the crack'
(ligâli) lyúku ŋkomba '(the car) of Komba'

{A} ---> a in the remaining environments, for example:

na mînu 'with teeth'
na máhimba 'with lions'
na amâbu 'with (my / our) mother'
(bana) ba álâmu '(the children) of the brother/sister-in-law'
(lisamba) lyaka Ndoungou(lu) '(the field) of Ndunguru'
(nyumba) jaka Toulôuka '(the house) of Turuka'

The preclitic {nA} is of great significance in this work, especially when Tone Classes (in Matengo, Manda and Ngoni) are determined, since it constitutes one of the major contexts of tonal differentiation (see Chapter 5). When referred to later in this study, only the morphophonemic representation (i.e. nA) will be given for Matengo, and the morpho-phonological alternations just described will be assumed. In Manda, Ngoni and Swahili, {nA} is invariably realised as na.

1.1.1.2.7. INSTABILITY OF FINAL VOWELS

There is another type of vowel alternation in Matengo which is associated with the vowels in word-final position. At first sight, there appears to be a wide range of free variation in this position, individual words displaying vowels belonging to one of three sets:

Set 1 I : i e ei ϵ

Set 2 U : u o ou ɔ

Set 3 A : a ou

Examples: {atati} 'father' : atâti, atâte / atâtei, atâte
 {amabU} 'mother' : amâbu, amâbo / amâbou, amâbo
 {ambujA} 'grandmother' : ambûja, ambûjou

However, choice between these realisations is largely determined by syntactic factors. We can distinguish three environments: declarative, emphatic (for instance in reaffirmation) and vocative, in which the normal selection is as follows:

	<u>DECLARATIVE</u>	<u>EMPHATIC</u>	<u>VOCATIVE</u>
I	i (sometimes e)	e	ei
U	u (sometimes o)	o	ou
A	a	a	ou

Although complicated by features of discourse, lexically we may say that there is a system of three vowels only operating in word-final position in Matengo. We will, accordingly, cite Matengo nouns with the final vowels /i/, /u/ or /a/ that they display in the declarative context.

The situation discussed here is not unique to Matengo, as a similar one obtains in Lunda (L 52, Zambia) where only three vowels are distinguished in word-final position (Michael Mann, personal communication).

1.1.1.2.8. TONE

The question of tone, i.e. relative contrastive syllabic pitch, is important to this study, since irregularity of tonal correspondence is here interpreted as a possible pointer to intra-Bantu loaning; Chapter 5 is devoted to the tonology for Matengo, Manda and Ngoni. At the systemic level, four tonal distinctions can be made: high, low, rising and falling. Tone can be borne both by a vowel and a syllabic nasal (M), as in :

ŋ-kongu	'tree'
mí-kongu	'trees'

In marking tone, (level) high is marked á, low is unmarked; rising and falling tones are marked ǎ and â, respectively.

Briefly, Matengo is a tonal language and lexical distinctions based on tone alone abound in the language, cf

li-kǒlu	'vegetable'	vs	li-kôlu	'cave'
li-tânga	'door'	' vs	lí-tanga	'cucumber'
má-hóumbi	'	vs	ma-hóumbi	'lots of dust'
ki-híka	'it will come'	vs	kí-híka	'piece of wood with fire'

In our study of tone here, we will concentrate on the nominal system, as tone is not lexically distinctive in the verbal system, whereas disyllabic-stem nominals studied in Chapter 5 group themselves into eight tone classes (compared to only three in both Manda and Ngoni).

1.1.1.3. THE VOWELS OF MANDA, NGONI AND SWAHILI

1.1.1.3.1. THE VOWELS OF MANDA (N11)

Manda vowels are broadly similar to those of Matengo, with the same symmetrical 7-vowel structure; the half-close vowels and the diphthongs alternate freely in the speech of my informant for Manda (Mr. G.I.T. Haule). The phonological and morphophonological phenomena of lengthening, contraction and desyllabification, vowel harmony, etc., follow a similar pattern to that in Matengo, except that *iei* → *ei*, and *y* is lost at least after *l*, *s* and *j*. The only major differences relate to two features: word-final vowels and tone. Manda has seven vowels contrasting in word-final position, e.g.

li-párahi	'grass-hopper'
mí-veilei	'body'
lí-dete	'reed'
lí-tama	'cheek'

lí-nyoto	'frog'
ngóu wou	'clothes'
sárafu	'army/driver-ant'

in contrast to the reduced system and indeterminate realisation found in Matengo (see 1.1.1.2.7., above). Tonally, Manda unlike Matengo displays lexical contrast among the verbal radicals, as in:

- (a)
- | | |
|-----------|--------------------------------------|
| ku-hyôma | 'to become angry/sullen' |
| ku-tôunga | 'to string beads' |
| ku-bêsa | 'to rebuke' |
| ku-kêka | 'to breathe heavily with difficulty' |

as contrasted with

- (b)
- | | |
|----------|--------------|
| kú-heiga | 'to answer' |
| kú-kota | 'to ask' |
| kú-louva | 'to ask for' |
| kú-ligha | 'to swear' |

In the part of the nominal system studied in Chapter 5, Manda has three tone classes, against eight in Matengo (see 5.1.2., below).

1.1.1.3.2. THE VOWELS OF NGONI (N12)

Unlike Manda and Matengo, Ngoni has five vowels, phonetically realised as [i], [ɛ], [a], [ɔ] and [u]. (In this work these Ngoni vowels will orthographically be presented as i, e, a, o and u).

Otherwise, Ngoni displays the same phenomena of lengthening and vowel harmony as those two languages, other things being equal; Ngoni is closer to Manda in its rules for coalescence and desyllabification. All the five vowels of Ngoni contrast in word-final position. There are again three tone classes among disyllabic-stem nominals, but these are not identical with the tone classes of Manda (see 5.1.3., below).

1.1.1.3.3. THE VOWELS OF SWAHILI

Swahili, like Ngoni, is a five-vowel language. There is no lexical distinction of tone in any of the relevant dialects of Swahili. Standard Swahili has a stress-system, with stress usually falling on the penultimate syllable. Where vowels fuse across morpheme boundary, coalescence, assimilation and desyllabification take place as follows:

Table I : Vowel Contraction in Swahili

	V ₂ i	e	a	o	u
V ₁ i	i miba 'thorns'	ye myezi 'months'	ya myaka 'years'	yo myoyo 'hearts'	yu vyuma 'pieces of iron'
a	e meno 'teeth'	e wenyewe 'owners of'	a wana 'children'	o pote 'everywhere'	(au) waume 'husbands'
u	wi mwiba 'thorn'	we mwezi 'month'	wa mwaka 'year'	o moyo 'heart'	u mume 'husband'

There appear to be no examples of syllabic reduction of the sequence a + u.

The product of such fusion is not lengthened unless in stressed position. The system of vowel harmony in Swahili is broadly similar to that in Matengo (see 1.1.1.2.6., above), except for diphthongs and the preclitics {nA}, {-A} and {-AkA} as discussed in that section.

Loan words and derivative words do not show the same type of assimilation process illustrated in Table I, above, e.g.

<u>ki</u> itikio	'chorus'	<u>from</u>	kuitikia	'to answer'
<u>kie</u> lelezo	'illustration'		kueleza	'to explain'
<u>ki</u> apo	'oath'		kuapa	'to take an oath'
<u>ki</u> ongozi	'leader'		kuongoza	'to lead'
<u>ma</u> endeleo	'development'		kuendelea	'to develop'
<u>ma</u> ongozi	'leadership'		kuongoza	'to lead'
<u>ma</u> isha	'life'		Loan word from Arabic	
<u>ma</u> embe	'mangoes'	Loan word from	Hindi	
maarifa	'knowledge'	Loan word from	Arabic	

1.1.2. CONSONANTS

1.1.2.0. INTRODUCTION

Of the four languages covered by this thesis, Matengo contains the lowest number of consonants, Swahili the highest; in between Manda and Ngoni have very similar consonant inventories. The consonant inventory of Swahili has been augmented by adoptives from Arabic, e.g. the velar fricatives /x/ and [χ]. While Swahili has, for example, eight fricatives ([f, v, s, z, ʃ, x, χ, h]), by contrast only four fricative sounds ([s, z, h, ɦ]) occur in Matengo.

1.1.2.1. MATENGO CONSONANTS

1.1.2.1.0. INVENTORY OF CONSONANT SOUNDS

A full inventory of the consonant sounds attested in Matengo is given in the table below (Table II).

Note that, in this thesis, [ɲ] is symbolized orthographically by ny. The sequence [ɲ] + [g] is symbolized by ng, otherwise [ɲ] occurs as ɲ.

Table II : Matengo Consonant Sounds

	BILABIAL	ALVEOLAR	PALATAL	VELAR	GLOTTAL
PLOSIVE	p b	t d		k g	
AFFRICATE			j		
NASAL	m	n	ɲ	ŋ	ḥ
LATERAL		l			
FRICATIVE		s z			h
SEMI-VOWEL	w		y		
SYLLABIC NASAL	m̩ ɪ	n̩ ɪ	ɲ̩	ŋ̩	
PRE-NASALIZED CONSONANT	mb	nz nd		ŋg	ḡḥ

1.1.2.1.1. h, ḥ AND d, z

There is arguably a phonemic distinction between h and ḥ in this language : they must be regarded as separate phonemes since they can occur in identical environments. Compare A with B:

<u>A</u>		<u>B</u>	
mí-hambu	songs, form dances	mí-ḥíhi	garden trenches
lí-himba	lion	ḥíngu	neck
ḥíndu	things	ḥáñzu	firewood

\tilde{h} is also, of course, the morphophonemic product of a sequence

$\{N-\}$ + $\{\tilde{h}\}$ as in:

η -hwâhi	wind
η - \tilde{h} îndu	in things
η -hîhi	garden trench

The sounds d and z occur in Matengo in strictly limited environments. With regards to the $\{N-\}$ and $\{M-\}$ morphophemes distinguished in 1.1.2.1.2, the status of the sounds d and z may be defined as follows:

- d is the obligatory realisation of $/t/$ preceded by N
- d is also the obligatory realisation of $/l/$ preceded by N
- z is the obligatory realization of
 - (a) $/s/$ preceded by N
 - (b) $/j/$ preceded by M

1.1.2.1.2. Clusters

Four major types of consonant clusters may be distinguished in Matengo: CSv, NSv, NC and NCSv clusters, where N stands for an asyllabic nasal. The syllabic nasal is symbolised as $M-$ in 1.1.2.1.3. below, q.v.), Sv stands for Semi-vowel and C for any other consonant apart from N and Sv.

1.1.2.1.2.1. CSv Clusters

The following CSv clusters have been attested in Matengo:

/pw/ as in kú- <u>pw</u> aga	'speak, say'
/bw/ as in <u>bw</u> ôga	'mushroom'
/tw/ as in kú- <u>tw</u> eika	'put load on another's head'
/sw/ as in kú- <u>sw</u> eka	'ooze'
/lw/ as in kú- <u>lw</u> ala	'become ill'
/kw/ as in kú- <u>kw</u> aba	'crawl'
/gw/ as in <u>gw</u> âna	'big child'
/hw/ as in kú- <u>hw</u> ata	'wear clothes'
/hw/ as in ŋ- <u>hw</u> êla	'rainy season'
/ty/ as in kú- <u>ty</u> ola	'excel in dancing'
/ky/ as in kú- <u>ly</u> unga	'wander about'
/ky/ as in <u>ky</u> âni?	'what?'
/hy/ as in kú- <u>hy</u> oula	'sharpen'

1.1.2.1.2.2. NSv Clusters

Only the following NSv clusters occur:

/mw/ as in <u>mw</u> -âna	'child'
/nw/ as in kú- <u>nw</u> enga	'grumble'
/pw/ as in <u>pw</u> îta	'thirst'
/ŋw/ as in kú- <u>ŋw</u> ena	'gnaw'
/my/ as in <u>my</u> âka	'years'
/ny/ as in kú- <u>nny</u> aka	'insult'

Note that the cluster /ny/ is distinct from the single consonant /ny/, cf. kú-naka 'to burn'. The cluster is written nny in this work.

1.1.2.1.2.3. NC Clusters

The NC clusters permissible are:

/mb/ as in	m _i -m [^] b ^o umba	'girl, woman'
/nd/ as in	ma-nd ^o utu	'pop-corn'
/nz/ as in	k _i -nz [^] atu	'basket'
/ng/ as in	k ^u -l ^u nga	'look'

NC does not occur; in this context C is always voiced.

1.1.2.1.2.4. NCSv Clusters

The following NCSv Clusters occur:

/mbw/ as in	j _i -m [^] b ^o -wa	'dog'
/nzw/ as in	k ⁱ -nz [^] w [^] anzu	'sound showing disgust, surprise,....'
/ndw/ as in	Ma [^] nd ^u w [^] anga	(proper Name)
/ngw/ as in	m [^] a [^] -ng ^u w [^] inyila	'wrinkles'
/mby/ as in	m [^] -by ^u agalila	'brooms'
/ndy/ as in	k ^u -nd ^u yeka	'to smear something on me'

1.1.2.1.3. Syllabic and Asyllabic Nasals

There is in Matengo a significant distinction in the realisations of certain simple consonants when preceded by either the syllabic nasal (represented in this work as M) or the asyllabic nasal (N). The pattern of realisation can be summarized as follows

	p	b	t	l	s	j	k	g	h
M__	m _p	m _b	n _t	n _d	n _s	n _z	n _k	n _g	n ^h
N__	mb	m	nd	n	nz	ɲ	ŋg	ŋ	h̃

Examples :

		M__	N__
kú-pala	'want, look for, love, like, ...'	bu- <u>m</u> palá mwênga (they want you)	ba- <u>m</u> bálá nênga (they want me)
kú-beinga	'chase'	bu- <u>m</u> beingá mwênga	ba- <u>m</u> eíngá nênga
kú-tila	'run away from'	bu- <u>n</u> tilá mwênga	ba- <u>n</u> dílá nênga
kú-losa	'rebuke'	bu- <u>n</u> dosá mwênga	ba- <u>n</u> ósá nênga
kú-sutu(la)	'pierce'	bu- <u>n</u> sutú mwênga	ba- <u>n</u> zútú nênga
kú-jiha	'imitate, mimic'	bu- <u>n</u> zihá mwênga	ba- <u>n</u> íhá nênga
kú-kema	'call'	bu- <u>n</u> kemá mwênga	ba- <u>n</u> gémá nênga
kú-gamba	'back-bite, slander'	bu- <u>n</u> gambá mwênga	ba- <u>n</u> ámá nênga
kú-hiha	'hide away from'	bu- <u>n</u> hihá mwênga	ba- <u>n</u> íhá nênga

1.1.2.1.4. Consonant Phonemes

Phonemically, only the following consonant units need to be set up in Matengo:

LABIAL	FRONT	MEDIAL	BACK
p	t		k
b		j	g
	s		h
	l		
m	n	ɲ	ŋ, ɳ
ɱ	ɳ	ɲ	ŋ
w		y	

1.1.2.2. Consonants in Manda and Ngoni

Broadly speaking, the Manda and Ngoni consonant inventories are similar, except for the presence of the velar fricative [ɣ] in Manda only. Here is a Table summarizing the consonants attested in the two languages:

	Bilabial	Labio-dental	Alveolar	Post-Alveolar	Palatal	Velar	Glottal
Plosive	p b		t d			k g	
Affricate				tʃ	ʃ		
Nasal	m		n		ɲ	ŋ	
Lateral			l				
Trilled			r				
Fricative	ʋ	f v	s z	ʃ		ɣ	h
Semi-Vowel	w				y		
Syllabic Nasal	m̩		n̩		ɲ̩	ŋ̩	
Pre-nasalized Consonant	mb	mv	nz nd			ŋg	

Table III : Manda and Ngoni Consonants

The realisations in Manda of certain simple consonants when preceded by a syllabic nasal (M) are like those given for Matengo (see 1.1.2.1.3.).

Those of Ngoni may be given as follows: {MC} → m + C, e.g.

Ngoni: m̩-lâsi 'bamboo'
m̩-gosi 'male person'

It is significant to note that the following consonants , which occur in Manda and Ngoni do not occur in Matengo:

/v/

/f/

/v/

/z/ except in the environment N__

/ʃ/

/tʃ/

/dʒ/

/d/ except in the environment N__

1.1.2.3. Consonants in Swahili

Swahili consonants may be tabulated as follows:

	Bilabial	Inter- dental	Labio- dental	Alveolar	Post- Alveolar	Palatal	Velar	Glotta
Plosive	p b			t d			k g	
Aspirated Plosive	ph			th			kh	
Nasal	m			n		ɲ	ŋ	
Fricative		θ ð	f v	s z	ʃ		x ɣ	h
Affricate					tʃ	j		
Lateral				l				
Trilled				r				
Semi- Vowel	w					y		
Syllabic Nasal	m̩			n̩		ɲ̩	ŋ̩	
Pre-nasalized Consonant	mb		mv	nd nz			ŋɡ	

Table IV : Swahili Consonants

Aspiration of the voiceless plosives has no semantic significance and is not represented in the current orthography. Ashton 1944, quoted by Myachina 1981 (translation of 1960), records the following minimal pairs:

paa	'roof'	versus	p ^h aa	'gazelle'
tembo	'palm wine'	"	t ^h embo	'elephant'
kaa	'charcoal'	"	k ^h aa	'land crab'

In my experience, these distinctions are now no longer made and will not be represented in the Swahili data cited here.

Ashton (1944 : 4) also observes that the sounds '... b, d, j and g are normally pronounced implosively, ' j ' being 'very palatal'. Myachina 1981, however, points out that not all authorities are agreed on the implosive quality of these sounds. She notes that C. Meinhof, for example, did not identify b and d as implosives. There is, nonetheless, agreement on the explosive quality of these sounds when preceded by syllabic nasals :

u <u>b</u> ao	'plank'	versus	m <u>b</u> ao	'planks'
d <u>e</u> ge	'big bird'	"	n <u>d</u> ege	'bird'
k <u>i</u> jia	'small path'	"	n <u>j</u> ia	'road'
k <u>i</u> goma	'small drum'	"	n <u>g</u> oma	'drum'

In this work, the orthographic symbols used for these sounds are identical with the phonetic symbols given in the Table above, except for the following:

<u>Phonetic Symbol</u>	<u>Orthographic Symbol</u>
tʃ	ch
ɲ	ny
ʃ	sh
x	kh
ɣ	gh
ŋ	ng'
θ	th
ð	dh

Initial nasals before a consonant are assumed to be syllabic.

1.2. NOUN CLASSES

1.2.1. Introduction

The morphological phenomena most relevant to this work are those dealing with nominal classification.

As in all Bantu languages, class system or concord system is fully operative in the three EN languages studied here, and in a slightly reduced form in Swahili. Nouns may be grouped into 19 classes in Manda (N 11), Ngoni (N 12) and Matengo (N 13), and into 15 classes in Swahili, the nouns of each class being marked by characteristic nominal class prefixes - thereby indicating the concord class to which a particular nominal radical belongs, e.g.

Class 5 prefix	li-	in N 11, N 12, & N 13
	Ø	in Swahili
as in N 11	<u>li</u> -párahi	'locust'
N 12	<u>lí</u> -dete	'reed'
N 13	<u>lí</u> -tuku	'cheek'
Swahili	Ø-tunda	'fruit'
Class 7 prefix	ki-	in N 11, N 13 & Swahili
	chi-	in N 12
as in N 11	<u>kí</u> -woko	'hand'
N 12	<u>chí</u> -dege	'bird'
N 13	<u>ki</u> -líba	'water-place'
Swahili	<u>ki</u> -tanda	'bed'

Other words (possessives, demonstratives, numerals, adjectives, verbs, and so on) referring to the same noun must show concordial agreement with it, by bearing the relevant class markers. Such markers will usually be prefixes (or suffixes) that are associable in shape with the nominal class prefix, e.g. in Matengo:

<u>Noun</u>	<u>Possessive</u>	<u>Numeral</u>	<u>Demonstrative</u>	<u>Adjective</u>	<u>Verb</u>
<u>ba</u> -ná	<u>ba</u> -né	<u>a</u> -béli	a- <u>ba</u>	<u>a</u> -lâsu	<u>a</u> -híkĩte
children	mine	two	these	tall	have come

'these two tall children of mine have come'.

or, in Swahili (the same sentence):

wa-toto wa-ngu wa-wili ha-wa wa-refu wa-mefika

In this way, any particular noun controls the agreement of a particular class, and usually bears the prefix typical of that class. The nouns which do not have the prefixes typical of their classes, but do in fact control agreement like those with typical prefixes, are relegated to sub-classes. The usual practice in many works on Bantu languages is to letter sub-classes thus: 1a, 1b, 2a, 2b, 2c, etc., as will be shown in the list of Matengo nominal classes in section 1.2.7.1 below.

1.2.2. Numeration of Nominal Classes

The method of regarding each set of concords as constituting a class and numbering classes separately was originally devised by Bleek (Bleek 1869) and Meinhof (Meinhof 1932), who treated classes strictly as systems of concordial agreement which did not necessarily have to be regarded as Singular and Plural. This approach, which is prevalent among Bantuists, makes statements regarding classification easier and more economical to handle. The two scholars distinguished up to 22 possible noun classes in Bantu languages. More recently, Guthrie has recognised 19 as reconstructable for Common Bantu. His inventory does not, however, include the augmentative class 20, attested in all the EN languages as gu- and in the Ndaui dialect of Shona as k(w)u-, e.g. in Shona: k(w)u-ro 'thing', ku-benzi 'fool' (Mkanganwi 1972); in Matengo: gû-ndu 'big animal', gú-juni 'big bird'.

In this work, numbers denoting class membership of a particular nominal form will usually be shown after the nominal entry, often preceded by the abbreviation NC (i.e. Noun Class) to avoid confusion with the numbers denoting Tone Class (TC), e.g. , in Matengo:

li-kôlu	NC 5/6	TC 6/5	'vegetable'
li-kôlu	NC 5/6	TC 4/4	'cave'

Finally, it is significant to mention certain other concepts often discussed in connection with the Class system in Bantu; these include 'Primary versus Secondary Classes', 'Dual Class Membership' and what might be referred to as 'Class : Meaning Relationship'. Let us briefly turn to some of these concepts.

1.2.3. Primary and Secondary Classes

Carter (1982 : 42) defines Primary Classes as "those in which noun stems appear when we wish to refer to them as normal specimens of their kind", and Secondary Classes as "those which give an additional meaning" such as that of diminution and augmentation of an entity. Class 21 in Shona (zi- , Augmentative), for example, is Secondary only (Carter & Kahari 1980, p. 8). Whiteley (1966 : 27) sets up sub-classes 5a and 6a to handle Augmentatives only in Yao, P21. Matengo noun classes 12 and 13 (ka- and tu- , respectively) are also always Secondary and are used to express diminutive meaning; likewise, Matengo locative classes 16 - 18 are normally Secondary. Furthermore, noun stems of Primary classes may assume the prefixes of classes 4, 5, 6, 7, 8, 11 and 20 which express an additional meaning such as diminutive, augmentative, pejorative (or even the connotation of intensity, concentration or types). Some stems can be found in all, or almost all, the secondary classes:

<u>Primary Class</u>	<u>Secondary Classes</u>
<u>mw-âna</u> 1/2 'child'	<u>ly-âna</u> 5/6 'big child'
	<u>gw-âna</u> 21/4 'big child'

Secondary Classes

<u>k</u> -âna	12/13	'small child'
<u>s</u> -âna	7/8	'small child'
<u>lw</u> -âna	11/8	'small child'
<u>lí</u> -mw-ana	5/6	'big child'
<u>gú</u> -mw-ana	20/4	'big child'
<u>ká</u> -mw-ana	12/13	'small child'
<u>kí</u> -mw-ana	7/8	'small child'
<u>lú</u> -mw-ana	11/8	'small child'

1.2.4. Ambivalent Class Membership

Apart from the situation where noun stems belong to two different noun classes, one primary and the other secondary, there are cases in which a stem may be associated with two wholly primary classes, thereby displaying ambivalent class membership. Loans, in Shona are especially prone to ambivalence of this kind, (especially NC 5/9 alternation) e.g. gádhēni (garden), tirangi (trunk), dhiraikirini (drycleaner).

Some nouns in Matengo also display such ambivalence: e.g.

<u>ka</u> hâ(g)wa <u>ajei</u> <u>jibéihwíke</u>	'these coffee beans are ripe'
<u>ka</u> hâ(g)wa <u>aká</u> <u>kabéihwíke</u>	'these coffee beans are ripe'
<u>lu</u> -gójí <u>lw</u> -ítu <u>lu</u> -héikatíke	'our rope has snapped'
<u>ŋ</u> -gójí <u>gw</u> -ítu <u>gu</u> -héikatíke	'our rope has snapped'

1.2.5. Initial Vowel Pre-prefixes

Two vowel pre-prefixes i- and u- are attested in Matengo: i- in classes 4a, 5a, 6a, 9a, 9c and 10a, and u- in class 11a. In all these noun classes, except in classes 9a, 9c and 10a the vowel pre-fixes occur before -CV stems. Examples:

í-mi-tu	gravy	(Class 4a)
i-lî-hu	ashes	(Class 5a)
í-ma-bu	stones	(Class 6a)
ú-lu-ba	crack	(Class 11a)
í-n-zala	famine	(Class 9a)
í-hula	rain	(Class 9a)
í-m-buhi	goats	(Class 10a)

The occurrence of i- in noun classes 9a and 10a is frequent and no conditioning factors seem to be readily available, cf. A and B, below:

<u>A</u>	<u>B</u>
í-ŋ-oma drum	ŋ-ômbi cow
í-ŋ-ama meat	ŋ-ânga kind of blowing horn
í-m-bouku cane rat	m-bôula type of wild fruit
í-m-bulu nose	m-bôpu scythe
í-m-banya gap in teeth	m-bunyâli cat
i-n-dêila way	m-bounzu antelope

Items of both columns occur in equal numbers. Only two nouns constitute NC 9c with the initial vowel pre-prefix:

í-hula	rain
í-nahu	kind of vegetable

í-hula is a regular reflex of CB *-búda in Matengo but í-nahu is not associable with CB. The latter has no cognates in neighbouring languages or Swahili, but the former has, e.g. Manda and Ngoni: fûra and Swahili mvua.

It is significant to note further that the other EN languages (Manda, Ngoni or even Mpoto) do not have this initial vowel pre-prefix, nor do Swahili, Yao and other languages neighbouring or related to Matengo. The geographically nearest language which has the initial pre-prefix is Nyakyusa (M31 in Guthrie's classification).

1.2.6. Meaning:Class: Relationship

All the nouns referring to human beings or personified entities in Matengo belong to Noun Classes 1 and 2 (i.e. Classes 1 and 2 in the broad sense, see section 1.2.7., below for their subclassification). No other referents are admitted in these classes:

mú- [^] ndu	person	NC 1
b- [^] âna	children	NC 2
Kápesa	'Mr. Rabbit', in stories	NC 1a (otherwise kí-pesa NC 7 rabbit, hare).
ki-l [^] ema	cripple	NC 1a
áka-Toulóuka	the Turukas	NC 2a

The stems of Classes 1 and 2 nouns are found in other classes when a secondary class meaning is intended, as in:

ly- [^] âna	NC 5	big child
gw- [^] âna	NC 20	big child
k- [^] âna, s- [^] âna	NC 12, NC 7	small child
lw- [^] âna, ká-mwana	NC 11, NC 12	big child
my- [^] âna, m- [^] âna	NC 4, NC 6	big children

Noun classes 12, 13 and 20 are basically secondary. They serve to convey such additional meanings as diminutive/augmentative.

í-li-bu (stone)	NC 5/6	ká-li-bu	small stone	NC 12
		gú-li-bu	big stone	NC 20
		tú-li-bu	small stones	NC 13

Primary classes 4, 5, 6, 7, 8 and 11 may also be used as secondary classes (to express augmentative and diminutive meanings, intensity, concentration, etc, cf. 1.2.3. above):

í-ma-bu	NC 6 (stones)	mí-ma-bu	NC 4	big stones
mw-âhi	NC 3 (blood)	ly-âhi	NC 5	lots of blood

mí-kongu	NC 4 (trees)	má-kongu	NC 6	huge trees
nyûmba	NC 10(houses)	ki-nyumba	NC 7	concentration of houses
mû-ndu	NC 1 (person)	hy-ána-ká-mundu	NC 8	good-for-nothing people

The remaining classes, i.e. Classes 3-11, as Primary Classes, cannot readily be linked with any well-defined areas of meaning. (Nouns referring to animals, for example, are spread throughout classes 5-10 but do not occur in classes 3,4 or 11). To exemplify the semantic indeterminacy obtaining in the referents of the nouns in NCs 3-11, the following nouns have been adduced:

NC 3/4,

ŋ-kongu	tree
mí-těla	medicine
m-puku	bag
m-mûtu	hand
m-pounga	paddy

NC 5/6

lí-himba	lion
li-tôki	banana
lí-tuku	cheek
lí-hyohi	smoke
li-hâmu	shame

NC 7/8

ki-nzâtu	basket
kí-juni	bird
kí-houbi	leopard
ki-boungi	forehead
s-êmbi	mango
kí-joungu	garden

NC 9/10

ŋômbi	cow, cattle
in-gâhu	ginger

nyũmba	house
ĩ-hula	rain
ĩĩngu	neck

NC 11

lú-jusi	bee
lú-nyāhi	grass
lú-gonu	sleep
lw-āla	grinding stone
lú-tumbu	stomach

Like classes 12, 13 and 20 the locative classes 16, 17 and 18 are also secondary. Their prefixes {pA-}, {kU-} and {mU-} are usually pre-prefixed to complete nouns of primary classes which may be associated with locativity.

ku-nyũmba	at home
pa-mā-nyāhi	near the grass
mú-lu-matu	on the wall

However, there are a few cases of attachment to a stem:

pā-nza	outside
kū-nza	outside
mū-nza	outside

The various morphophonemic changes of the prefix shapes given above. are presented in section 1.2.7.1. above.

Noun class 14 is associated with abstract concepts, but not exclusively:

ú-nnyahi	beauty	-nnyahi	'beautiful'	(adj.)
u-jānza	shrewdness	ŋ-zānza	'shrewd person'	
ú-longu	clanship	ŋ-dongu	'clansman'	

The last noun class which can clearly be associated with some specific meaning is NC 15 which almost exclusively handles nomino-verbals, as in:

kú-jeimba	singing
kú-leima	cultivating

There are, however, two exceptional nouns belonging to this class which do not refer to nomino-verbals:

kú-boku	hand, arm
kú-goulu	foot, leg

Plurals are in NC 6.

1.2.7. Matengo Noun Classes

1.2.7.1 List of Classes

Matengo Noun Classes may be summarised as follows:

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
1	M-C	m̂-pisi	cook
		m̂-dongu	relative
		m̂-kôsi	friend
	mw-V	mw-âna	child
		mw-îhi	thief
		mw-êni	owner
1a	Ø-	mû-ndu	person
		bâmbu	chief, Mr.
		lelêpa	driver
2	a-C	á-pisi	cooks
		á-longu	relatives
		a-mâbu	mother
		a-tâti	father
		a-mbûja	grandmother
		a-hôuku	grandfather

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
	b-V	b-âna children b-îhi thieves b-êni owners	
2a	aka -	âka-bâmbu chiefs, Messrs. âka-mbôumba women âka-lelêpa drivers	
2b	akaa-	âkaa-kôsi friends âkaa-lâmu in-laws	
3	M-C	m-pêihu walking stick m-mûtu head m-tandu bridge m-kongu tree	As in the M- prefix in class 1, above, the Morpho-phonological realisations of M- in this Class are identical to the ones discussed in Section 1.1.2.1.2.
	mw-V	mw-âka year mw-îha thorn mw-êni moon, month mw-ôju heart	
4	mi-C	mi-pêihu walking sticks mí-tandu bridges mí-kongu trees mi-mûtu heads	
	my-V	my-âka years my-êni months my-ôju hearts	
	m-V(i)	m-îha thorns	
	imi-CV	ími-tu gravy	
5	li-C	lí-himba lion li-nzeigi crab li-bôumba pit	The initial vowel pre-prefix in Classes 5/6, as in all the other Classes where it occurs, is also the portion of the nominal which is replaced by other affixes when the nouns in question are relegated to secondary classes, as in: lí-bu ká-li-bu(dim, sing) gú-li-bu(aug. pl) tú-li-bu(dim, sing)
	li-NCV	lí-ndu wild-animals	
	ly-V	ly-âna huge child ly-ôtu lot of warmth ly-ôungu pumpkin ly-ungûla frog	

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
6	l-V(l)	l-înu	tooth
		l-îhu	eye
	ili-CV	í-li-bu	stone
		i-lî-la	
		i-lî-hu	ashes
	ma-C	má-himba	lions
		má-nzéigi	crabs
		má-bôumba	pits
	ma-NCV	mâ-ndu	wild animals
	m-V	m-âna	huge children
		m-ôungu	pumpkins
		m-îhu	eyes
		m-înu	teeth
	ima-CV	íma-bu	stones
		imâ-la	lice
		imâ-hi	excreta
		imâ-ta	saliva, spittle
7	ki-C	ki-nzâtu	basket
		kí-houbi	leopard
		kí-lahu	surname
		kí-pâmba	termite
	s-V	s-âma	club, society
		s-êima	leg of animal
		s-ôubu	finger-nail
		s-ûmba	room
	si-NCV	sî-ndu	thing

.../

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
8	i-C	i-nzâtu	baskets
		í-houbi	leopards
		í-lahu	surnames
		í-pâmba	termites
	(h)y-V	(h)y-âma	clubs, society
		(h)yêima	legs of animals
		(h)y-ôubu	finger nails
		(h)y-ûmba	rooms
	hi-NCV	hi-ndu	things
9	N-	mbôpu	scythe
		nyûndu	hammer
		ngômbi	cow
		ñingu	neck
	ji-(NCCV)	nëmbu	scarification
		jí-mbwa	dog
	j-V	j-anakâbu	dog
9a	iN	ím-buhi	goat
		ín-zala	hunger, famine
		ín-yama	meat
		in-gâhu	ginger
		ín-oma	drum
9b	Ø	pěti	ring
		sûli	school
		bakûli	bowl
		sahâni	plate
9c	i-	í-hula	rain
		í-nahu	kind of vegetable

The treatment of the realisations of the morphophoneme N- is identical with the one given in 1.1.2.1:2.

The initial vowel pre-prefix which is prevalent in Matengo, is found in a proportionally greater number in Classes 9a and 10a than in any other pair of Gender Classes. And, by contrast, in 9a and 10a, it does not occur before monosyllabic stems, as it does, for example in 4, 5, 6 and 7

Only two members of Class 9C have been found in the data; these appear to be eccentric in every way. The nouns are í-hula (a reflex of OB *-búda 'rain') and í-nahu (apparently an indigenous word). j-anakâbu (above) is a compound form consisting of two stems, -ana and -bu and the prefix ji- and the stem augment -ka-. (The ji- in this form can be replaced by secondary class prefixes).

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
10	N-	mbôpu pûndu hôngbi hîngu	scythes hammers cattle, cows necks
	ji-(NCCV)	ji- ^Y mbwa	dogs
10a	iN-	ím-buhi ín-zusi ín-yama in-gâhu ín-oma	goats bees pieces of meat ginger(pl.) drums
10b	Ø	pěti sûli bakûli sahâni	rings schools bowls plates
11	lu-C	lú-hanzu lú-gonu lú-konzi lú-louhi	piece of firewood sleep finger whistling
	lw-V	lw-îha lw-êmbi lw-âla lw-ômbu	chameleon razor blade grinding stone type of vegetable
	l-V(ou)	l-ôusi	river
	ulu-C	úlu-mi ú-lu-ba	dew, mist crack

NC 11 nouns usually form Gender Class with either NC 10 or NC 8. A number of these NC 11 nouns, e.g. lw-îha 'cameleon' do not have any Plurals:

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
12	ka-C	ka-beîga small pot ka-têihu small chair ka-nyûmba small house ka-tâbu small book kâ-ndu thing ká-bâna chick	
	k-V	k-âna small child	
13	ty-C	tú-buhi small goats tu-nyûmba small houses tû-ndu things tú-bâna chicken tu-tâbu small books	
	tw-V	tw-âna small children	
14	u-C	u-jânza cunningness u-(g)weîmbi beer ú-(g)wali porridge u-gônzu disease ú-lei eleusine	
	w-V	w-îmi greediness w-înya eggs of lice	
15	ku-C	kú-jeimba to sing, singing kú-jou.ba to hide, hiding kú-huta to pull, pulling kú-kina to eat, eating	

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
16 {pA}:	pa/ -CVCV	pa-kǎja	at home
	-NCV-	pa-kanîsa	at the church
	-NCV	pa-má-nyǎhi	at the grass
	-CV	pa-nyûmba	at the house
		pǎ-nza	outside
		pá-hingu	on the neck
		pá-m-ihu	on the face
		pǎ-hi	on the ground
	pi/-CiCVCV	pi-kí-hinza	at the fire-place
	-CiCVnCV	pi-li-bôûmba	near the pit
	p-/-iCV	p-îhi	yonder
	pi-/iCVCV	pî-li-bu	near the stone
17 {kU}:	ku-/ -CV	ku-nyûmba	at home
	- CVCV	kû-nza	outside
	-CV CVCV	ku-kanîsa	at the church
	-NCV	kú-m-ihu	face
		kû-hi	underneath
		ku-ŋ̣-kongu	near the tree
	kwa-/Ca-CVCV	kwa-má-nyǎhi	on the grass
	Ca-CVNVCV	kwa-mábôûmba	near the pits
		kwí-ki-hinza	at the fire-place
18 {mU}:	mu-/M-CVCV	mu-ŋ̣-kongu	on the tree
	-CV-CVCV	mu-ŋ̣-déila	on the road
	-NCV	mú-lu-matu	on the wall
		mû-nza	outside

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	<u>Remarks</u>
18	M- / CVCV -CVNVCV	ḡ-ḡingu	on the neck
		ḡ-ḡindu	in the things
		ḡ-dwâta	on the grinding stone
		ḡ-nyûmba	in the house
		m-m-ihu	in the eyes
	mwa-/-Ca-CVCV	mwa-má-nyâhi	in the grass
		mwa-ka-nzâtu	in the small basket
	mwi-/-iCVCV	mwi-ki-bêga	in the pot
		mwi-li-jamânda	in the basket
	mwi-/-iCVCV -iCV	mwi-ilibu	on the stone
20	gu-C	mwi-in-yama	in the meat
		mwi-in-gâhu	in the ginger
		mwi-hi	in the areas across the valley
		gú-kongu	big tree
		gú-himba	big lion
		gú-li-bu	big stone
	gw-V	gu-nyûmba	big house
		gú-mw-ana	big child
		gú-ndu	big wild animal
		gw-âna	big child
		gw-îhi	big/notorious thief

1.2.7.2 Further Comments on Concord and Class Genders

Note that the following sets of Noun Classes share the same Concordial Agreement patterns: 4 and 9; 8 and 10; 3, 14 and 20; 15 and 17.

Note furthermore that Matengo Class Genders include: 1/2, 3/4, 5/6, 7/8, 9/10, 11/10, 11/8, 12/13, 14/4 for a few nouns, 15/6 for only two nouns: kú-boku (arm/hand) and kú-goulu (leg/foot), 20/4 and 20/6.

1.2.8. Manda and Ngoni Noun Classes

Each of these languages has 19 classes, which have been given here in less detail than the Matengo Noun Classes just presented in 1.2.7.

<u>Manda (N 11)</u>			<u>Ngoni (N 12)</u>		
Class	<u>Prefix</u>	<u>Example(s)</u>	<u>Prefix</u>	<u>Example(s)</u>	
1	M-C	n̄-seya old person	M-C	n̄'-longo	relative
				n̄'-gosi	male person
	mu-NCV	mu-ndu person	mu-NCV	mû-ndu	person
	mw-V	mw-ana child	mw-V	mw-âna	child
1a	∅	dâdi father	∅-	dâdi	father
		mâwu mother		mâu	mother
2	va-V	vâ-sêya old person	va-	vâ'-longo	relatives
				vâ'-gosi	male person
	v-V	v-âna children	v-V	v-âna	children
3	M-C	n̄'-kongo tree	M-C	n̄'-tându	bridge
		n̄'-pêla baobab tree		n̄'-pêra	baobab tree
	mw-V	mw-îsi pestle	mw-V	mw-îsi	pestle
		mw-âsi blood		mw-âsi	blood

<u>Manda</u>			<u>Ngoni</u>		
	<u>Prefix</u>	<u>Examples</u>	<u>Prefix</u>	<u>Example(s)</u>	
<u>Class</u>					
5	mi-C	mí-kongo trees mi-lâsi bamboo	mi-C	mí-kongo trees mi-lâsi bamboo	
	m-V(i)	m-îsi pestles	m-V(i)	m-îsi pestles	
	my-V	my-âka years my-ôyu hearts	my-V	my-âka years my-ôyu hearts	
	li-C	lí-leme stomach lí-bwa dog li-bwîbwi bat lí-fu ashes	li-	lí-leme stomach lí-bwa dog lí-gela hoe lí-fu ashes	
	l-V(i)	l-îhu eye l-înu tooth		l-îhu eye l-înu tooth	
	ly-V	ly-ênge hot ash	ly-V	ly-ênge hot ash	
6	ma-C	má-leme stomachs ma-tôki bananas má-daku buttocks má-tama cheeks mâ-bwa dogs	ma-C	má-leme stomachs ma-tôki bananas má-daku buttocks má-tama cheeks mâ-bwa dogs	
	m-V(i)	m-îhu eyes m-înu teeth		m-îhu eyes m-înu teeth	
7	ki-C	kí-veiga pot kí-baya cattle pan ki-souwoulou ant-heap kî-ndu thing	chi-C	chí-viga pot chí-bana store chí-huvi leopard chí-ndu thing chí-ganja palm of arm	

Class	<u>Manda</u>		<u>Ngoni</u>	
	<u>Prefix</u>	<u>Example(s)</u>	<u>Prefix</u>	<u>Example(s)</u>
7	ch-V	ch-ûmba room	ch-V	ch-ûmba room
		ch-ôuma (piece of) iron	ch-V	ch-âma club, society
	ky-V	ky-ôuma (piece of) iron		
		ky-êima leg of animal		
8	fi-C	fí-veiga pots	vic-C	ví-viga pots
		fí-baya cattle pans		ví-bana stores
		fí-ndu things		ví-huvi leopards
	fy-V	fy-ûmba rooms	vy-C	vy-ûmba rooms
		fy-ôuma pieces of iron		
		fy-êima legs of animals		vy-âma clubs, societies
9	N-	mbâyu adze		mbâju adze
		nyâma (piece of) meat	N-	nyâma (piece of meat
		ngômbi cow		mbûhi goat
		njûchi bee		
	Ø	sóbora pepper	Ø	sóbola pepper
		mêne goat		nêmbu tattoo
		sômba fish		sômba fish
		fûra rain		fûra rain
		sôni shyness shame		sôni shyness shame

	<u>Manda</u>		<u>Ngoni</u>	
	<u>Prefix</u>	<u>Example(s)</u>	<u>Prefix</u>	<u>Example(s)</u>
Class				
10	N-	m-bâyu adzes n-yâma pieces of meat ŋ-ômbi cattle, cow s n-jûchi bees	N-	mbâju adzes nyâma pieces of meat ŋômbi cattle mbûhi goats
	Ø	fûra rain kanîsa churches sârafu driver ant	Ø	fûra rain kanîsa churches sârafu driver ant
11	lu-C	lú-konji finger lu-vahu side of body lu-kolo clan	lu-C	lu-mînga thorn lú-daka soil lú-vecha fish-hook lú-kolo clan
	lw-V	lw-âyu sole of foot	lw-V	lw-âyu sole of foot
	l-V(ou)	l-ôusi river		
12	ka-C	ká-nyumba small house kâ-bwa small dog ka-mwana small child ká-yuni bird	ka-C	ká-dege small bird kâ-bwa small dog ká-haku small bag ká-doda small male warrior
	k-V	k-âna small child	k-V	k-âna small child
13	tu-C	tú-nyumba small houses tû-bwa small dogs tú-yuni birds	tu-C	tú-nyumba small houses tû-bwa small dogs tú-doda small male warriors

<u>Manda</u>			<u>Ngoni</u>		
	<u>Prefix</u>	<u>Example(s)</u>		<u>Prefix</u>	<u>Example(s)</u>
Class					
13	tw-V	tw-âna small children	tw-V	tw-âna	Small children
14	u-C	ú-kali fierceness ú-tali distance ú-havi witchcraft	u-C	u-gógolo old age ú-sopi whiteness u-hîmu stupidity ú-tjwala beer	
	w-V	w-ógohi fear w-âtu canoe	w-V	w-avu net w-uzi string	
15	ku-	kú-lisa to feed kú-kanda to knead	ku-	kú-lisa to feed kú-ngena to enter	
16	pa-	pá-nyumba at home pâ-ndu at some place	pa-	pá-nyumba at home pâ-ndu at some place	
17	ku-	kú-nyumba at home ku-kánisa at the church kú-nja outside	ku-	kú-nyumba at home ku-kánisa at the church kú-mbele in front	
18	mu-/m-	mu-lúdaka in the mud m-kanísani in the church m-mátama in the cheeks	mu-/m-	mú-mbele behind m-kanísani in the church m-chíbiki on/in the tree	
20	gu-	gú-bwa huge dog gú-goulou big foot/leg	gu-	gú-nyumba huge house gú-doda big male warrior	
	gw-V	gw-âna big child	gw-	gw-âna big child	

1.2.9. Swahili Noun Classes

There are 15 noun classes in Swahili. Compared to the 19 classes in the EN languages, the most remarkable difference is the absence of Classes 12, 13 and 20 in Swahili, the merging of Classes 11 and 14 into one class: Class 14, and the absence of locative nominal prefixes (pa, ku and mu). The locative classes do exist as concord systems.

The Swahili classes may be listed as follows:

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	
1	m-C	m-tu	man, person
		m-ke	wife
		m-nyama	animal
		m-tawala	ruler
	mw-V	mw-ana	son
		mw-izi	thief
		mw-eriyewe	owner
		mw-okozi	saviour
1a	Ø	ng'ombe	cow
		babu	grandfather
		mama	mother
		padre	priest
		askofu	bishop
2	wa-C	wa-tu	people
		wa-ke	wives
		wa-nyama	animals
		wa-tawala	rulers
	w-V	w-ana	children
		w-enyewe	owners

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	
2a	Ø-	ng'ombe	cow
		paka	cat
		mama	mother
		babu	grandfather
2b	ma-	ma-padre	priests
		ma-babu	grandfathers
3	m-C	m-ti	tree
		m-to	river
		m-lima	mountain
	mw-V	mw-itu	forest
		mw-ezi	month
		mw-aka	year
	m-V(o)	m-oto	fire
		m-oyo	heart
4	mi-C	mi-ti	trees
		mi-to	rivers
		mi-lima	mountains
	my-V	my-ezi	months
		my-aka	years
5	Ø-	tunda	fruit
		shimo	pit
		embe	mango
	j-V	j-ani	leaf
		j-ino	tooth
		j-icho	eye
		j-iko	cooker, fire-place
	ji-/Monosyllables	ji-we	stone
		ji-tu	giant

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>	
6	ma-	ma-tunda	fruits
		ma-shimo	pits
		ma-embe	mangoes
		ma-jani	leaves
7	ki-C	ki-su	knife
		ki-tabu	book
		ki-mulimuli	firefly
	ch-V	ch-umba	room
		ch-ama	club society
		ch-andalua	mosquito net
		ch-ombo	tool
		vi-su	knives
8	vi-C	vi-tabu	books
		vi-mulimuli	fireflies
		vy-umba	rooms
	vy-V	vy-ama	clubs
		vy-andalua	mosquito nets
		m-buzi	goat
		n-guo	clothes
		n-chi	land
9	N _{acc}	n-zi	fly
		n-g'e(n-ge)	scorpion
9a	Ø -	pete	ring
		zeze	banjo
		taa	lamp
		nazi	coconut
		pua	nose

<u>Class</u>	<u>Prefix</u>	<u>Examples</u>
10	N-	m-buzi goats n-guo clothes n-dugu relatives n-dizi bananas n-yama pieces of meat
10a	Ø-	pete rings zeze banjos taa lamps nazi coconuts pua noses
14	u-	u-fa crack on wall u-zuri beauty u-yoga mushroom u-baharia seamanship
	w-V	w-avu net w-ivu envy w-oga cowardice w-embe razor blade
15	ku-C	ku-fa to die/dying ku-cheza to play/playing ku-imba to sing/singing ku-omba to ask/asking for/ begging
16	(pa-)	nyumba-ni } at my house pangu
17	(ku-)	nyumba-ni } at my home kwangu
18	(mu-)	nyumba-ni } in my house mw-angu

1.3. Speakers of Matengo, Manda, Ngoni and Swahili

We noted at the beginning of this chapter that apart from looking into the phonological and relevant morphological aspects of Matengo, Manda, Ngoni and Swahili, as an introduction to the discussion that follows in chapters 2 - 5, we would also attempt a discussion on the speakers of these four languages. In the following section, sections 2.3.1. - 2.3.4., we will look at the geographical, historical, social and other relevant features associated with these speakers.

With regard to Matengo and Manda speakers, who are assumed (historically) to be the original inhabitants of the EN area (prior to the arrival of the Ngoni and other inhabitants), only brief notes have been made. By contrast, we have dealt at length on the Ngoni speakers. Being relatively new to the area, the Ngoni speakers present a more interesting topic for discussion; the discussion under section 1.3.3. has mainly concerned itself with a definition of the type of 'Ngoni Speakers' referred to in this thesis.

We have also dealt at length on the question of Swahili speakers trying to define which type of 'Wa-Swahili' use the language that has exerted much influence on the Matengo language.

1.3.1. Matengo Speakers

Matengo speakers (Wa-matengo) occupy the hilly area flanked by the shores of Lake Nyasa to the East and by the extensive Ngoni plains to the North-East. They are estimated at 100,000. Gulliver (1951) describes them as Wa-nindi who migrated from the south (i.e. south of present Liparamba Catholic Mission Station, see sketch-map I.) and settled all the way towards the North-East into the area occupied by the Wa-ngindo until the time of the Ngoni arrival, circa 1870. The Ngoni pushed most of them back into the North-eastern part of the present Mbinga District. These migrant Wa-nindi Speakers got their new name Matengo from the thick forests associated with the area they occupied (the word ma-tengu (NC 6, TC 1) means 'thick forests')

Most of the documented accounts on Matengo available to the present author deal less with their historical movements and warfare with the Ngoni and Ndendeule, than with their administrative system (Chieftainship or Ubambu), and their famous pit-hole farming method, "i-ngolu", which enable the Matengo farmers to conserve water and the rich, fertile loamy soil of the hill-sides and valleys. The Matengo hill-sides and valleys themselves present among the most picturesque landscapes in the EN area: plots of different kinds of vegetation alternating with sections of plantations and natural forests.

The major pre-occupation of the Matengo is farming of cash crops and foodstuffs for domestic consumption. The crops grown usually include Coffee Arabica, maize, beans, cassava, sunflower, potatoes, wheat, sweet potatoes, eleusine, ground-nuts, bananas and other fruits. Animal husbandry is also extensively practised: cattle and goats are reared both for domestic

and, especially for marital reasons. Bride price is normally given in terms of these animals. Chicken, pigs and other animals are raised for domestic consumption.

Their language, Ki-Matengo, which is at the centre of the study attempted here, has been generally classified with Manda and is designated N 13 by Guthrie. It will be shown further below (Chapter 5) that Matengo is tonally more complicated than either Manda or Ngoni. The present author has limited his scope of principal research to these three languages and Swahili, and there is therefore, no attempt here to compare Matengo with other EN languages (Mpoto, Mwera, Ndendeule, etc.) or with other graphically proximate languages (Yao, Kisi, Nyanja, etc.)

1.3.2. Manda Speakers

Manda speakers (Wa-manda) are reported to be the indigenous inhabitants of the eastern littoral strip of Lake Nyasa in Tanzania now shared by the Mwera, and Mpoto to the South, the Kisi and the Pangwa to the North. The Wa-manda extend inland as far as the Ruaha Catholic Mission Station (see sketch map, page 67), beyond which area Umanda borders with Ungoni. They occupy an areas within which the colonial District headquarters (at Manda) was established, hence the common designation "Manda group" for the languages I prefer to refer to as Eastern Nyasa (EN).

The main preoccupation of these people is fishing. They grow rice and cassava in large quantities; groundnuts, eleusine and sweet potatoes in small quantities; they are famed for promoting, the beautiful Nyanja-based dance mganda which has spread into neighbouring areas, especially to the South and Southeast.

1.3.3. NGONI SPEAKERS

1.3.3.O. Sources and Terminology

More documented accounts are available on the Tanzanian Ngoni language (N 12, in Guthrie's classification) and its speakers (Wa-Ngoni) than on any of the other EN languages. Such works range from books or lengthy articles on the history of the Wa-Ngoni (e.g. Gulliver 1951) or on aspects of their language (Spiess 1904, Ebner 1953) to brief comments made in passing on some socio-economic features of the people (Hatchel 1948, Robson 1958) or on specific morphophonological or historical aspects of their language (Guthrie 1948, Harries 1949, Doke 1954, Bryan 1959). Indeed, it must be noted that against a background of remarkable dearth of research and subsequent documentation associated with the EN area, the various works on Ngoni in existence (especially those of the early German and British scholars) are impressive and afford considerable credit to their authors.

We ought, however, to point out also that the term NGONI has not always been used in these accounts to refer to the same language and to a homogeneous set of speakers. While, for example, Spiess 1904 set apart 'Sutu and 'Ngoni' or Gulliver 1955 also carefully distinguished between what he calls 'true-Ngoni' from 'new-Ngoni' (or 'Sutu'), Harries 1949 and Hatchell 1948 used the term NGONI to refer solely to a language spoken in the Songea District having close affinity to Zulu and to a people of Zulu origin, i.e. descendants of the Abe-Nguni people who lived in Natal as far back as 1600 A.D., notably the Zulu speakers. Robson 1962, steering a somewhat middle course, defines the Ngoni of the Songea District as a result of the fusion of two

sets of people . Guthrie 1948 and Bryan 1959 clearly relate modern Ngoni speakers more to their neighbouring language speakers than to the Zulu speakers of South Africa, and do so solely on the strength of the linguistic affinities obtaining within the EN languages.

Such differences of opinion could perhaps be resolved by keeping apart the labels NGONI SPEAKERS and NGONI LANGUAGE(S). Equally important is the need to distinguish the various uses of these labels at different historical stages in the development of the modern speakers of Tanzania Ngoni. The origin of the Ngoni speakers and the unique formation process of their language can be explained by recourse to the background of the Wa-Ngoni.

1.3.3.1. Historical Background

1.3.3.1.1. Migration and Settlement

The name NGONI has been derived from the general term for the South African Bantu speaking people: A-NGUNI. Specifically, it relates to the ZULU bands of emigrants who fled the tyranny of Chaka - a leader who cherished the commitment to establish a powerful Zulu Empire by military conquest. The most prominent of these bands was that of Zwangendaba. Zwangendaba and his band emigrated, according to Gulliver (1955), between 1823 and 1824. They were also, in their turn, committed to conquest and raiding. No tribe on their way was left untouched by their show of military prowess. The Swazi and the Sotho were among the first to fall prey to these Zulu dissidents. They crossed the Zambesi River at the end of 1835 (according to Gulliver 1955), went through Zambia and Malawi, in which countries some of them settled, entered Tanzania and raided a large section of that country before eventually settling in the Songea District (see sketch map III).

It is estimated that, at the time they crossed the Zambesi River, the number of people that formed this peripatetic war-band was around 1,000. But the numbers of these predatory raiders were rapidly increasing through the absorption of numerous captives of both sexes. Even this modest figure of 1,000 had already been significantly augmented by Swazi, Sotho and Ndebele captives. It is therefore reasonable to suppose that the Zulu-speaking warriors who finally reached and settled in Southern Tanzania were insignificant in number vis-à-vis the large number of their captives and of the local people they had fought and subdued. The 'Ngoni' military rule was at the peak of its power and achievement in about 1890; at that time over twenty Tanzanian tribes had already been raided and their human loot of trans-Nyasa origin made up the bulk of the so-called 'New Settlers' of the Songea District; also the original indigenous people in the area of their occupation (most likely the Ndendeuli, Nindi, Matengo, Yao, Manda, Pangwa and Ngindo) had either been killed or subdued. Two prominent groups of Ngoni 'Settlers' may be distinguished at this stage: Ngoni-Mbonani or Ngoni-Mshope on the one hand, and, on the other, Ngoni-Zulu or Ngoni-Njelu. The two groups were not always in accord, and either of them had to be wary of attack from yet a third group of Ngoni Settlers, Ngoni-Maseko.

But things suddenly came to a permanent halt in 1905, during the 'Maji-Maji' war between the German Colonial Government of the Tanganyika Territory and the people of the Southern part of the country, involving especially the Ngoni and the Hehe. Both were defeated, and for the Ngoni, the result of this defeat is assessed by Gulliver 1955 (p.26) as follows: "The dismal defeat of the Ngoni and the

disastrous aftermath of the Rebellion were critically decisive in Ngoni affairs, and in some ways the effects of the demoralization has continued into modern times. The Ngoni were conclusively and effectively defeated and their leaders removed by execution or flight. By 1907 the traditional regime, military prestige and old ways of life had been swept away for all time".

1.3.3.1.2. Assumptions on Contact and Development

From such an observation one is tempted to conclude that an important gap had been created within the hierarchy of the Songea Ngoni. The leadership role being impossible to dispense with, it had to be taken on by the people who had previously been captives and who were themselves also part of the bulk of the 'New Settlers' of Songea. In consequence, the military, cultural and linguistic influence of the 'Ngoni Masters' would have tended to fade away as time passed. This might indeed have been the case.

But one notices from the accounts available that even at the time of the Ngoni military domination over the area, the powerful masters imposed little linguistic acculturation on their subjects. An examination of modern Tanzanian Ngoni leaves one with no doubt that its close linguistic affinity is with the neighbouring languages. Even lexical loans are not as considerable in number as is often claimed: in my Ngoni data, for example, the number of lexical items that may be directly related to Zulu is almost negligible, for instance:

<u>ZULU</u>	<u>NGONI</u>	<u>GLOSS</u>	<u>MANDA</u>	<u>MATENGO</u>
utshw-ala	ú-chwala	beer	-	-
	u-gîmbi	beer	gêimbei	u-(g)wêimbi
uku-funa	kú-funa	like / want	-	-
	kú-gana	like / want	kú-gana (cf. kú-pala)	

<u>ZULU</u>	<u>NGONI</u>	<u>GLOSS</u>	<u>MANDA</u>	<u>MATENGO</u>
i:gundane	li-gúdwani	rat / mouse (cf. lí-chenje)	(cf. li-kúli)	
uku-ngena	kú-ngena	enter		
	ku-yíngila	enter	ku-yíngila	kú-jingila
u-daka	lú-daka	mud	(cf. lú-doupi)	(cf. lú-toupi)

This situation would seem to require an alternative explanation; nothing is known for certain, even from the various documented accounts referred to in this work, about the linguistic policy devised by the Ngoni rulers for such people of various language backgrounds. It is reasonable to suppose, however, that since the early Zulu emigrants were mainly men, inter-marriage between members of the ruling cadre and their female captives or the women of conquered areas was the normal practice. It is equally plausible to assume that these Zulu warriors badly needed effective co-operation with the men they had captured or subdued in order to ensure for themselves more and more success in warfare. Such factors, among others, would seem to have induced the rulers to tolerate bi- or even multi-lingualism within the area of their rule.

1.3.3.1.3. "Linguistic Acculturation"

Unlike the interesting case of Kololo conquest of the Luyi state, the original Songea Ngoni rulers did not impose their language (Zulu) on their subjects, a situation that clearly affirms that military conquest does not necessarily lead to linguistic acculturation even when it involves moderately long-term subordination. Bryan (1959 : 153) observes that in some cases, "the conquering group either had to live with bilingualism or else lost its language." Adam Kuper and Pierre Van Leynseele (1978 : 348) re-affirm Bryan's observation, asserting that the situation described above would appear to constitute a reasonable development and a sharp contrast to the Luyana/Kololo replacement. Fortune, n.d., provides a detailed account of the survival of the Kololo language (under the new name: Lozi) among the Luyana speakers.

1.3.3.2. Ngoni Speakers and Ngoni Language

As a consequence, modern Tanzanian Ngoni language must be described less in terms of its connection with the South African Nguni language, and more in terms of its close affiliation with the Eastern Bantu languages, that is the language of the majority of people who constituted the stock of the New Settlers of Ungoni, brought into the area by the military prowess of the Zulu Warriors. It is maintained in this work that prior to the arrival of these Ngoni settlers, no language existed in the area which was fundamentally distinct from the ones now spoken in the southern parts of Tanzania. We also emphasize here that the language lacks direct genealogical descent from any one of the Eastern Bantu languages. It is a recent creation, a sort of 'hybrid', young language of less than two centuries of age. The Zulu Angoni from Natal in South Africa are its indirect creators, their own language having made a rather insignificant structural impact on it and also having, to a limited extent, augmented its lexical inventory. The major role of the Nguni warriors in the creation of modern Ngoni has been that of bringing together the various types of people who are now the descendants of the earlier settlers of U-Ngoni.

Modern Tanzanian Ngoni speakers use only one variety of Ngoni. By contrast, some of their predecessors are said to have been bi-linguals in the special sense of fluently using two types of 'Ngoni Language' - what might be termed original and modern Ngoni. E. Kihwili, my language consultant for Ngoni, whose home is situated in the central part of U-Ngoni and can trace the genealogy of his mother to a Zulu speaker, observes that only the very old Wa-Ngoni can actually speak fluent original Ngoni; these are very few and are usually bi-lingual. He recalls an incident in which a Ngoni speaker of Maposeni-Peramiho (see sketch map III), Mzee A. Tawete, was recounting the history of the Angoni, and in the middle of his story he became overwhelmed

by his past experiences and shifted from modern into original Ngoni, thereby becoming incomprehensible to his entire audience.

Original Ngoni, as a language traceable to the Zulu language, is now practically extinct, though a substantial number of modern Ngoni speakers still trace their genealogy to the Zulu Anguni. There are also a number of social traits Ngoni speakers have inherited from Zulu. Typical of them is the custom of ear-slitting or the use of certain animal names as surnames for the members of the various Ngoni clans:

<u>Clan Surname in Ngoni</u>	<u>Zulu</u>	
Nyoni	i-nyoni	'bird'
Mbuzi	i-mbuzi	'goat'
Nyoka	i-nyoka	'snake'
Nguruwe	i-ngulube	'pig'
Ndovu	i-ndlovu	'elephant'

It is important to set apart the language of the modern inhabitants of U-Ngoni from the historical affiliations claimed by the speakers of modern Tanzanian Ngoni.

1.3.3.3. Modern Tanzanian Ngoni vis-à-vis other EN Languages

Of the EN languages, Manda appears to be closer to Ngoni than any of the others. This view is clearly borne out when one compares structural and tonal data in the three languages. Also, most of the morphological and phonological information examined earlier on in this Chapter seems to lend further support to this hypothesis.

Perhaps the most obvious similarity between Ngoni and Manda is the tonal uniformity shown in Chapter 5 below. Matengo seems to be closer to Ndendeule and Mpoto. Almost the only notable disparity between Manda and Ngoni consists in the small number of lexical borrowings from Zulu in Ngoni, which are absent in Manda.

1.3.3.4. Modern Tanzanian Ngoni Vis-a-Vis Other Ngoni Languages

There are languages in both Malawi and Zambia bearing the name NGONI, countries through which the Zulu warriors passed and in which some of them settled.

'Malawian Ngoni' has been described by Doke 1954 (as earlier by W.A. Elmslie 1891) as showing very little divergence from the parent language. It constitutes an interesting contrast to the Tanzanian variety.

By contrast, the 'Ngoni' language spoken in Zambia, like Tanzania Ngoni, is no longer traceable to Zulu. In Channessian and Kashoki 1978, it is noted that, as a Zulu divergence, Zambian Ngoni is practically extinct, and only survives in songs and royal praises. It is further observed that Zambian Ngoni people can now be linguistically described as constituting two distinct languages varieties: Tumbuka-speaking Ngoni of the Magodi area and Nsenga speaking Ngoni of the Mpezeni area.

1.3.3.5. Conclusion

The significance of this introductory discussion on the speakers of Ngoni (N 12) and their language is mainly to define the speakers of the language which will be used later on (Chapts. 3-6). It will be shown below, for example, that the main sources from which Ngoni has drawn most of its structural forms, i.e. neighbouring languages such as Manda, Matengo, Mpoto, Pangwa, Ngindo, Ndendule, etc., appear in some cases to have borrowed a number of lexical items from Ngoni (see Chapts. 3, 4 & 5). Some of these can be shown as constituting cases of 'obvious' loans from Zulu into Ngoni, subsequently diffusing into Manda, and perhaps less readily into Matengo.

The emphasis in this discussion has been on the fact that present-day Tanzanian Ngoni was born out of the need for linguistic communication

by a large number of people brought together into the Songea District from many different language backgrounds by the South African Zulu warriors who fled the Chaka Empire in the 1820s. It is also argued that before the 1860s i.e. before the arrival of these New Settlers, Ngoni was not in existence. The assumed linguistic affinity between modern Ngoni and Zulu has been questioned; rather Ngoni has been shown to share close affinity with the other EN languages, notably Manda (N 11). The creation of this language and evolution to its present state does not, it is here argued, reflect the genealogical history of its speakers.

1.3.4. Swahili Speakers

The lexical impact of Swahili on Matengo and the other E N languages covered in this thesis is so great that in a comparative work of this type the inclusion of a discussion on Swahili speakers is deemed necessary.

Matengo has borrowed so enormously from Swahili that the whole of the next Chapter has been devoted to this source of linguistic adoption. Swahili also appears to figure prominently as a source of Matengo lexical borrowings of intra-Bantu definition.

Originally Swahili (i. e. the dialect of Ki-Unguja, classified by Guthrie 1967/71 as G42d), was spoken in Zanzibar. Ki-Unguja, one of the 17 dialects of Swahili (Whiteley 1971) is still presumed to be spoken by some Zanzibaris; in 1930, it was selected by the Inter-territorial Language Committee for East Africa (Johnson 1939) for standardization and development for wider use in the then British African Territory. Its closest rival was Ki-Mvita, G42b in Guthrie's classification, the Swahili dialect spoken in and around Mombasa, Kenya, which has a long literary history, especially with regard to poetry (Whiteley 1971). The choice sparked off disension and deep ill-feeling against Ki-Unguja and the resultant Standard Swahili among the Ki-Mvita speakers who had generally held their dialect to be "superior" to Ki-Unguja, and their attitude seems to have remained unchanged until to-day. Kahore (1976 : 22-26) describes the rivalry as follows:

"The trend of language development in Zanzibar and the coast, which showed extreme alien influence on one particular group, caused the dialect groups creating what we know to-day as the Northern group headed by

Ki-Mvita (dialect of Mombasa) and the Southern group headed by Ki-Unguja (the dialect of Zanzibar). The former became very critical of the development in the latter and accused it for being a 'language of ignorant people' as it had a great influx of foreign words..... The influx of foreign words into the languages and the official acceptance of this process as a standard way of developing it... led to a division between the dialect groups causing bitter rivalry between Ki-Mvita and Ki-Unguja representatives of the Northern group and the Southern group, respectively. This rivalry was joined by the German and British scholars, each siding with one of the groups.... The truth is that the representatives of the Northern group never changed their attitude and never accepted Ki-Unguja and the Standard Swahili up to the present day".

Standard Swahili is now no longer identifiable with Ki-Unguja, as this extract shows.

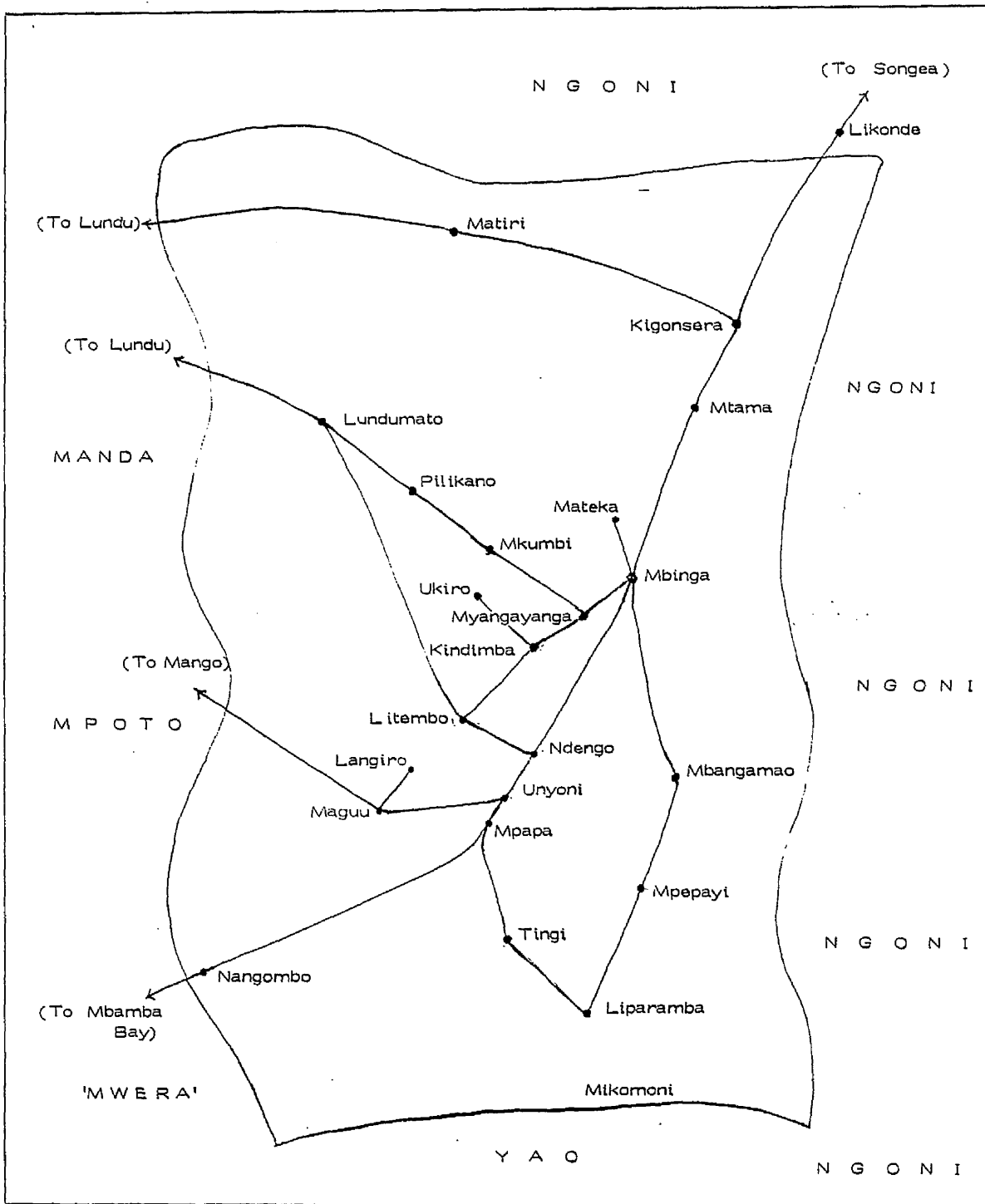
Whiteley 1969 provides a rather detailed account of the history and use of Standard Swahili. The development of this language as part of the language policy of Tanzania is also given several works, notably Harries 1969, Abdulaziz 1971, Whiteley 1971, Kahore 1976 and Abdulaziz 1980. It is this language (i.e. Swahili in its standard form) the linguistic status of whose speakers appears to be one of the current controversial questions among Swahilists, and more generally among some of the current users of Standard Swahili in Tanzania themselves. It is claimed by some that the language has its wenyewe "owners", and that only these wenyewe must consequently be its model users. This assumption is held mainly by the coastal

and Zanzibari users of Standard Swahili and its admirers. Other users of this language hold the view that Standard Swahili does not have rightful claimants to "ownership", its users normally having as first language one of the indigenous languages of Tanzania (Sukuma, Zaramo, Ki-Unguja, Gogo, Yao etc.). These Tanzania speakers of Swahili become linked with the language "habitually" either as a result of having learnt it at school or of having been exposed to an environment in which it is used. The present author shares the latter view and considers it to be a more plausible assessment of the current situation regarding Swahili. As spoken to-day, the language can hardly be linked with any particular set of speakers as its primary "owners", not even with speakers of the original Ki-Unguja (G42d) - despite the obvious historical connections. If there are any wenyewe, they are the modern speakers of Standard Swahili who have acquired it as first language, notably those born in towns. It is in this light that the present author prefers the use of the term "(fluent) habitual" speakers of Swahili (Turuka 1974 : 83) to that of "native" speakers of Swahili, in the sense usually conceived.

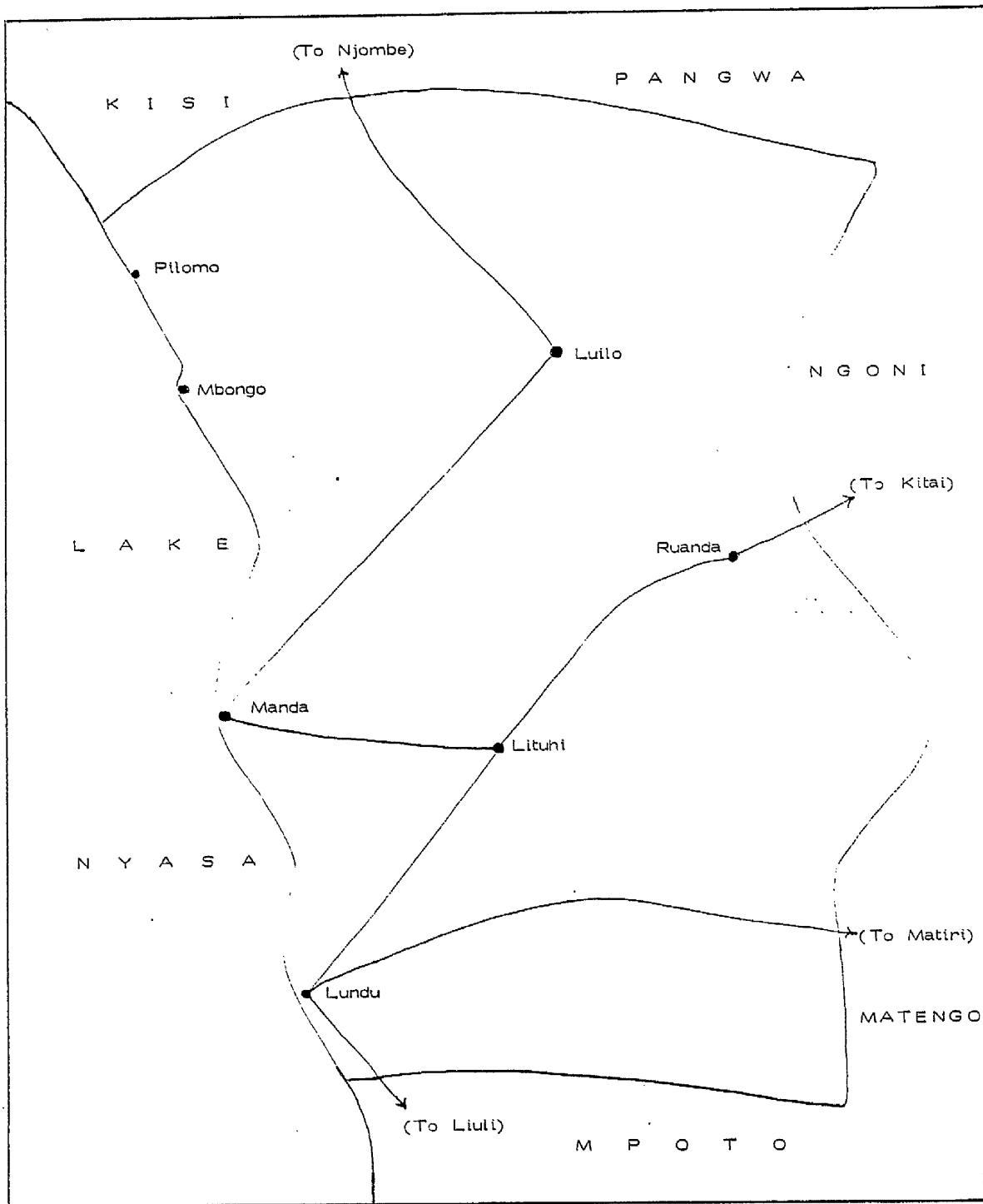
The habitual speakers of Swahili to-day are drawn from varied backgrounds and the indigenous languages that signal their geographical provenance exert considerable influence in shaping current modern Swahili phonologically, morphologically and lexically. Significant contributions to the development of the language (e.g. works of literature, lexical additions, etc.) are now drawn from more sources than were usually possible at the time the language was first formally "created" through the standardization of Ki-Unguja in the 1930's. The argument made here is, in the main, as follows: model Swahili speakers

may not fruitfully be associated with any particular set of speakers to-day, if such model speakers are to be defined in terms of specific geographical habitat.

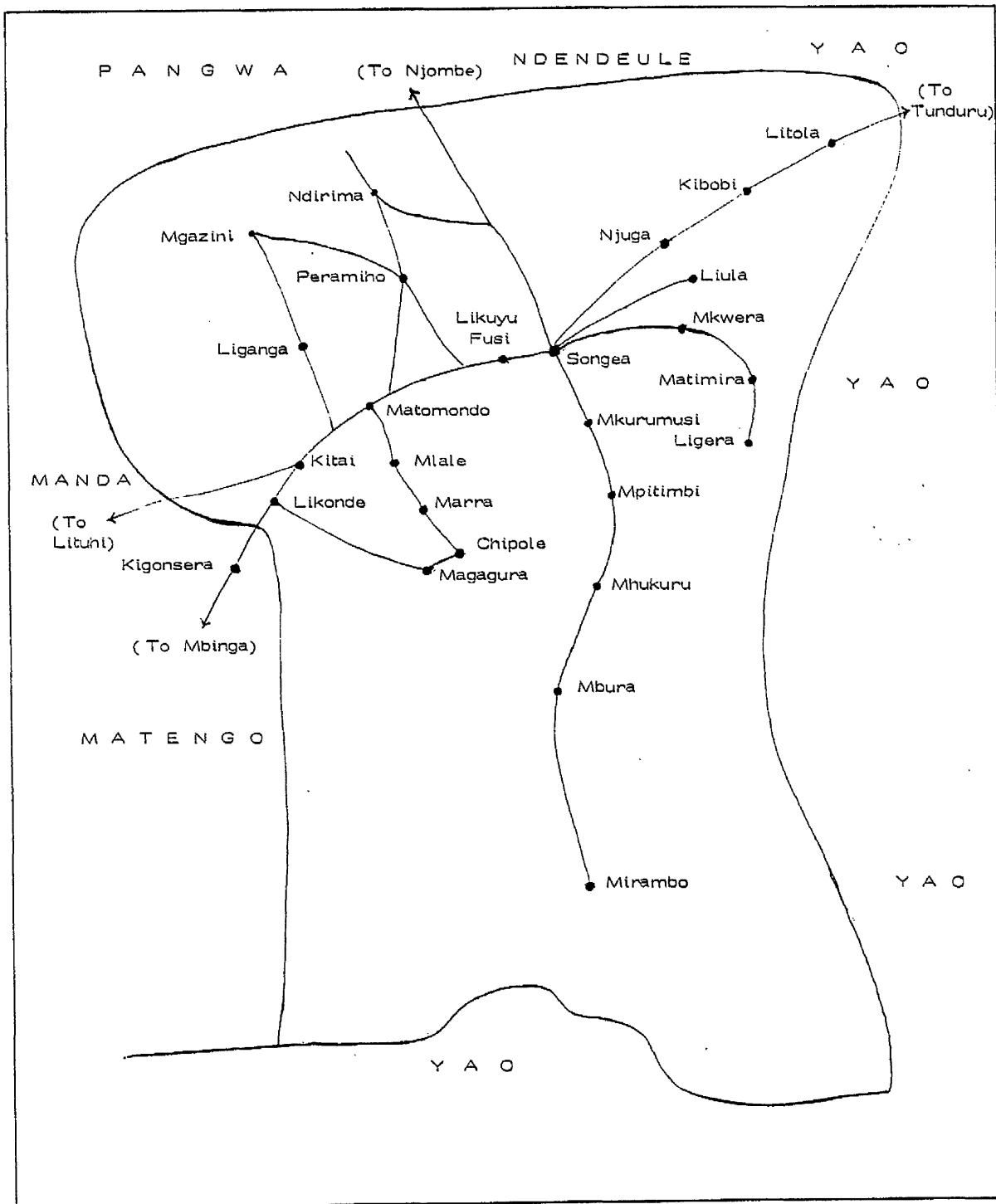
The majority of modern Matengo speakers have grown up in a bi-lingual situation and have consequently been conditioned to learn both Matengo and Swahili almost simultaneously, thus becoming habitual speakers of Swahili in the sense just defined. This situation has risen mainly due to the fact that Swahili has been the only medium of evangelization and scolarisation in U-Matengo. A combined force of, on one hand, Bavarian Benedictines of St. Ottilien, i.e. German Catholic missionaries, and, on the other hand, Swiss Roman Catholic missionaries had up to very recently taken the responsibility of spreading Christianity in U-Matengo. These missionaries have also constituted the most important group in running primary education in the area, and have almost exclusively employed Swahili as the linguistic medium in performing both functions.



Sketchmap I : U-Matengo



Sketchmap II : U-Manda



Sketchmap III : U-NGONI

CHAPTER TWO

NON-BANTU ADOPTIVES IN MATENGO (N13)

2.0. Aim

The main concern of this chapter is to introduce the subject of linguistic borrowing by summarizing concepts generally held about this topic and by applying some of them to Matengo. We have, in this chapter, used material whose identification status in Matengo is of proven validity, since it derives, usually via Swahili, from non-Bantu languages, notably Arabic, English, Portuguese, Hindi and Persian. The Matengo adoptives thus employed have, consequently, been characterized by the label "proven".

The question of methodology in identifying loans, which constitutes the underlying purpose of the entire thesis, is also introduced here by studying some of the 'conventional' and 'notional' approaches made in the process of discovering (or at least suspecting) borrowed material.

2.1. Proven versus Inferred Loans

With languages that have received considerable documentation (e.g. the Indo-European languages) the discovery of loans is greatly facilitated by the fact that intrusions into the lexicon or other areas of a language are detectable by comparing various recorded stages of the development of the language. Comparison of the lexical content of one documented language with several other documented languages also provides clues as to the sources of loaned material, thereby confirming linguistic borrowing. Adoptives confirmed in this way are what we will label 'proven', as opposed to merely 'inferred' or 'suspected' loans. The latter labels will be employed to refer, for example, to the type of loaning that occurs amongst related unwritten languages in contact. With such undocumented or very poorly documented languages (like those of the EN area), any identification methodology employed

can go no further than simply produce assumptions on the loan status of words or structures, since the analyst can proceed only by making comparisons of the synchronic states of the languages in question (see section 2.3. below). Proven loans in these languages are detectable only when it can be shown that material from well-recorded languages occurs in them. Such identification is further strengthened, and the case of proven loans in a language becomes more obvious, if transfer of loans from a well-recorded language to the recipient language is mediated by another language in which the transferred material has already been previously established as adoptives. The situation just described is precisely what obtains in Matengo, where in most cases loans in Swahili derived from linguistically unrelated languages (Indo-European, Semitic, etc.) are transferred into Matengo from Swahili, usually reach the latter from the source language via several other languages:

'sugar': Sanskrit → Persian → Arabic → Swahili → Matengo 'sukâli' or
 Sanskrit → (German/French →) English → Swahili →
 Matengo 'sukâli'

'table' Latin → Persian / Portuguese → Swahili → Matengo 'mêsa'

Such loans, which abound in Matengo, and occur widely in Bantu languages (sometimes found in considerably modified form and meaning) have been referred to by Knappert (1970 : 79) as 'travel words'.

About 1,000 proven loans in Matengo have been used for our discussion in this chapter (see Appendix II). Only a handful of these can be shown to have come into the language directly from the actual source language (see section 2.4.1. below). The majority have been adopted into Matengo via Swahili and have been compiled here mainly by consulting five major works: Krumm 1932, Johnson n.d., Johnson 1939, Whiteley 1967 and Zawawi 1979. Here are some typical examples of such proven loans:

<u>Arabic</u>	---->	<u>Swahili</u>	-->	<u>Matengo</u>	<u>Gloss</u>
adhab		adhabu		asâbu	punishment
dukkan		duka		li-lûka	shop, store
alām		alama		alâma	mark, sign,...
zâhab		dhahabu		sahâbu	gold
daftar		daftari		laputâli	exercise book
adab		adabu		adâbu	good manners
al-ḥamis		alhamisi		alamîsi	Thursday
zâmiṛ		dhamiri		samîli	conscience
daras		darasa		li-dalâsa	class-room
daqīqa		dakika		dakîka	minute(of time)
amānī		amani		amâni	peace
bārjā		baraza		balâsa	court(yard)
<u>Persian</u>	-->	<u>Swahili</u>	-->	<u>Matengo</u>	<u>Gloss</u>
balāya		malaya		malâja	prostitute
bunduq		bunduki		bunduḡi	gun, rifle
jāmadān		jamanda		li-jamânda	basket
darīcha		dirisha		li-ndilîsa	window
būm		boma		li-bōma	fortification
rang(paint)		rangi		lāngi	colour
sar-kārī		serikali		sél ikali	government
sīm(wire)		simu		sîmu	telegrap/telephone
bustān		bustani		busitāni	garden
<u>Portuguese</u>	-->	<u>Swahili</u>	-->	<u>Matengo</u>	<u>Gloss</u>
copo(glass)		kopo		li-kôpu	tin, can
bomba		bomba		li-bōmba	pump, pipe
caixa		kasha		li-kâsa	cupboard

<u>Portuguese</u> -->	<u>Swahili</u> -->	<u>Matengo</u>	<u>Gloss</u>
pera	pera	lí-pela	guava
padre	padre	pátili	priest
pipa	pipa	li-pyeîpa	barrel, casket
trombeta	tarumbeta	talumbêta	trumpet
<u>Hindi</u> ¹ -->	<u>Swahili</u> -->	<u>Matengo</u>	<u>Gloss</u>
bangri	bangili	bangîli	bangle, arm-let
	jora	li-jôla	length of cloth
	cheti	sêti	certificate
	debe	li-lêbi	tin
dhoti	doti	dôti	length of cloth
	embe	sêmbi	mango
goni	gunia	lí-guni(la)	sack
	lipu	lîpu	plaster
paisā	pesa	pěsa	pice, coin, money

<u>Greek</u> -->	<u>Swahili</u> -->	<u>Matengo</u>	<u>Gloss</u>
usquf	askofu	(a)sikôpu	bishop
qulam(pen, reed)	kalamu(pencil)	kalâmu	pen
qartas	karatasi	li-kalatâsi	paper
sabun	sabuni	sabûni	soap
simak	sumaku	sumâku	magnet

<u>English</u> -->	<u>Swahili</u> -->	<u>Matengo</u>	<u>Gloss</u>
bicycle	baiskeli	bâsikeli	bicycle
blanket	blanket	li-bûlangeti	blanket
boy	boi	bôï	house servant
chalk	chaki/choki	sôki	chalk
driver	dereva/dreva	lelêpa	driver

<u>English</u>	→	<u>Swahili</u>	→	<u>Matengo</u>	<u>(Gloss)</u>
flannel		fulana		pul ^â ana	under-vest
foot		futi		p ^â uti	of measurement
horn		honi		h ^ô ni	of a car
hospital		hospitali		(h ^ó)sipitali	hospital
hotel		hoteli		h ^ó тели	hotel
camp		kambi		li-k ^â ambi	camp
case		kesi		k ^â esi	usually court case
brush		brashi		bul ^â asi	brush
nurse		nesi		n ^ê si	nurse
machine		mashine		m ^â sini	machine
'mail steamer'		meli		m ^ě li	ship
motor-car		motokaa		m ^ú tuka	motor-car
number		namba		n ^ě amba	number
note		noti		n ^ô ti	of money
picture		picha		p ^â isa	picture
police		polisi		p ^ó lisi	police
post(-office)		posta		p ^ó sta	post office
shirt		shati		li-s ^â ti	shirt
cigar		sigara		sig ^â ala	cigar / cigarette
cinema		sinema		s ^í nema	cinema
screw		skrubu		sukul ^â ubu	screw-driver
socks		soksi		s ^ó kisi	socks / stockings
tank(cistern)		tangi		li-t ^â ngi	tank / cistern
yard		yadi		y ^â di	of measurement

Discussion on the way such non-Bantu loans are accommodated in Matengo is given in 2.5 below. For the moment, let us look into some of the common theoretical questions usually raised in connection with borrowing and how they relate to the non-Bantu loans in Matengo.

2.2. Causes and Direction of Borrowing

Linguistic borrowing is inextricably bound up with the social, political and economic history of a speech community (Arlotto 1972). Two communities of equal standing, which maintain contact for the sake of mutual benefit (like trading with each other) would tend to influence one another linguistically. I suspect that the relationship between, for example, Manda and Matengo has usually been of this type, trading activities being the common ground for contact between the peoples of these speech communities and thereby their languages borrowing from each other, the process of adoption being bi-directional.

However, the more common situation regarding linguistic loaning involves contact between two speech communities that are economically, politically, militarily or otherwise unequal, i.e. a dominant community versus a subjugated one - with linguistic material being transferred from the former to the latter. Within the EN area, it may be assumed that before 1885 the militarily dominant Zulu migrants exerted considerable influence on the languages of the neighbouring inhabitants, including Manda and Matengo. Obviously, after this period, the colonizing powers exerted linguistic influence on both Ngoni and the remaining EN languages. For about 70 years, the German and the British took political and administrative charge of Tanganyika. During this time (1891-1920 and 1921-1961) Matengo speakers were introduced to a number of cultural novelties: among them were the Western type of education, Christian (Roman Catholic) religion and many material elements of Western culture. Most of these novelties were accompanied

by their 'labels' or technical terminology. Both the German and the British adopted, for U-Matengo, the policy of using the then more widely spread Bantu language, Swahili, as a medium of instruction and evangelization, instead of English, German or Matengo. Swahili itself had, at this time, already made cultural contacts with Persian, Hindi, Portuguese and especially Arabic. Unguja-Swahili in particular was more prone to accepting Arabic loans than, for instance, its major competitor, Mvita-Swahili (see discussion on this under section 1.3.4. above). Later on English also played a significant role in augmenting the loan stock of Ki-Unguja.

The enforcement of Swahili as a medium of instruction, evangelization and administration throughout Tanzania in effect has turned practically all Tanzanians into bilingual speakers having a good command of at least their mother-tongue and some variety of the Ki-Unguja-based Standard Swahili. And, through the introduction of English as an obligatory subject in Primary Schools and a major medium of instruction in Secondary Schools, quite a significant proportion of Tanzanians has become multilingual. It has been observed (Bynon 1977:216, 239) that loaning presupposes cultural contact and that the normal conveyors of adoptives are bilinguals. In this special situation, almost all Matengo speakers are users of both Swahili and Matengo. Consequently, non-Bantu material transferred into the language via Swahili will tend to be conveyed by something like the entire community.

While the expected and normal direction of loaning in this respect is from Swahili to Matengo (or the other EN languages),

there is by contrast the interesting situation noted by Polomé (1980:96) where borrowing flows in the opposite direction. The augmentative and diminutive prefixes gu- and ka-, respectively, which are typical of the Ngoni languages (the term "Ngoni" having been used in that work to denote the whole of the EN area) are in fact now used in certain varieties of Standard Swahili, and their use is spreading widely:

e.g.	m-toto	'child'	→	gu-toto	'big child' (normally: toto)
	meza	'table'	→	gu-meza	'large table' (Port. mesa)
	m-toto	'child'	→	ka-toto	'small child' (normally ki-toto)
	meza	'table'	→	ka-meza	'small table'

2.3. The Question of Identification

2.3.1. Problems in the Identification of Loan-words

It has been maintained by some linguists, e.g. Haugen (1968), that borrowing, being a historical process, can be identified only by historical methods and that "to identify the the results of a historical process like borrowing is simply not possible by a purely synchronic study" (Haugen, 1968:229). In asserting this view, Haugen characterizes the process of identification as involving "a comparison between earlier and later states of a given language, to detect possible innovations; and thereupon a comparison of the innovations discovered with possible models in other languages. This double comparison is a corollary of our definition of borrowing; its application requires a knowledge of earlier states of the language, as well as of whatever languages may conceivably have exerted the influences in question" (Haugen, 1968:227). Haugen also quotes the work of Pike & Fries in which equally strong criticism is made of the use of the synchronic

method for the identification of loans: "in a purely descriptive analysis of a dialect of a monolingual speaker, there are no loans discoverable or describable" (Haugen, 1968:227). He argues furthermore that if words "contain sequences that are less common and are found by synchronic analysis to have different status, they will not thereby be revealed as loanwords, but as something else to which a different name should be given" and concludes his article by the firm pronouncement: "The question of identification of loans is shown to be primarily a historical question, not susceptible to the methods of synchronic analysis. So far as loans are discoverable by the letter method, it is not as loans, but as 'residual structural irregularities' than 'co-existent systems'".

By contrast, Hope (1971), though conceding that in practice a diachronic method continues to provide the most convincing results, does not minimise the significance of the synchronic method, accepting that both have a role to play in the identification of borrowing. The problem of identification, therefore, concerns the contention whether or not, given only the modern state of a language as is the case of most African languages, loans can ever be detected: Turay (1971) also seems to experience the same difficulty in his efforts to detect words that can be demonstrated either in form or meaning to have been accretions in Temne: "A study of this kind presents problems with which one is not confronted in the study of European languages, from which it is much easier to recognise loanwords than from neighbouring African languages: more rigid tests are necessary in order to establish the direction of inter-African loanwords. The dearth of adequate recorded material of any historical depth is a major reason for the difficulty in identifying items " (Turay, 1971: 39). With regard to undocumented or poorly documented languages,

even such a strong critic of the synchronic approach as Haugen appears to recognize the useful role it plays: "Can loanwords be identified by a student who knows nothing of the previous stages of a language? Such a technique, if there is one, would seem to be most useful in dealing with previously unwritten language; indeed it would be the only one available" (Haugen, 1968:299).

The synchronic methodology is fundamentally the application of the philological method to the modern state of related languages thereby collecting language items into sets of cognates - each set being held together by completely regular rules of phonological correspondence of the type required in the discipline of comparative philology. "The philological approach rests on a hypothesis about the universality of sound laws: whenever in a given language a change in pronunciation takes place affecting a sound or a sequence of sounds, the same change takes place uniformly in all forms of that language containing the same sound or sequence of sounds. Evidence for the hypothesis is provided by the possibility it affords of relating large numbers of linguistic forms, both in historical and comparative linguistics, by phonological rules or sound laws; the method involved to exploit the hypothesis then entails setting up starred forms to symbolize these systematic correspondences between languages" (Mann, 1970:134). With regard to adoption Mann observes that one ought not to assume that all or only those forms that are systematically related in this way have been directly transmitted without the intervention of loaning. "On one hand, the philological method may catch in its net some indirect reflexes (i.e. reflexes whose transmission has involved loaning between related languages at some point), especially where loaning took place at a time nearer to that of the proto-language; on the other hand, even in Indo-European studies a

residue of clearly related forms (including 'basic' vocabulary) has remained intractable to the philological method - except for the sort that sets up rules to account for single forms. Historical interpretation has to proceed therefore either on the assumption that these discrepancies are likely to be statistically insignificant, or on a detailed assessment of the status of each putative set of cognates'(Mann, 1970:134). The detection of "skewed forms" and the way that such indirect reflexes may be regarded as borrowings is the subject of the following three chapters. But the use of the "historical approach" as defined by Haugen (see first paragraph, 2.3.1) to identify loans is what concerns us immediately. Some words in Swahili, for example, have been identified as loans by certain authors - Krumm, Johnson, Whiteley, Zawawi,... Some of these adoptives can be shown, by consulting the works of Guthrie, Meeussen or Greenberg, to exhibit genealogical rather than contact characteristics. We suspect that discrepancies in the approaches employed toward identification may be responsible for the differences in the results obtained. Let us consider two such approaches; we have, only for the purposes of this discussion, labelled them 'Systematic' and 'Notional'.

2.3.2. Systematic versus Notional Approaches

The label 'Systematic' has been employed here to characterize the various approaches toward the identification of loans in which some underlying systematic methodology is detectable. One does not always encounter a uniform pattern followed by such approaches, rather, varied underlying principles are used by different authors. Some do, for example, use phonological skewing or indirect reflexes (see 3.3. below) and, especially, "extraneousness" as an indication of, or at least as a clue for the presence of a borrowed word in a language, e.g. Guthrie 1967-71, Carter 1980, Mann 1970, Phillipson 1972, and

to some extent Nurse 1977. Nurse 1977 also employs "distribution" as a tool for detecting loans. Elderkin 1978 dealing with putative loans in Hadza (a "Khoisan" language spoken in Tanzania) suspects loans by observing the "infrequency of occurrence...of consonants" .

The non-systematic approach, which we have labelled 'notional' here, is mainly based on an apparently subjective comparison between forms in a particular language and those of another language, given the assumption that the language involved have come into contact with each other. In this approach, an explanation for phonological and semantic differences found between the forms in the related languages is usually provided as well. Most of the works consulted in connection with non-Bantu Matengo loans from Swahili given in Appendix 2.1. appears to have been based on this approach (i.e. Krumm, 1932, Johnson not dated, Johnson 1939, Whiteley 1967 and Zawawi 1979). Mudzi 1976 also adopts the same identification approach in detecting English loans in Tonga. She notes the similarities between the words given in the first two columns below and concludes that the Tonga words derive from English; then she proceeds to explain the phonological and semantic differences obtaining between the related sets of vocabulary in the two languages. Similar words occur in Swahili and Matengo as we can see from the sets of words in the third and fourth columns.

<u>English</u>	<u>Tonga</u>	<u>Swahili</u>	<u>Matengo</u>
blanket	bbulanketi	blanketi	li-búlāngeti
box	bbokesi	(boksi)	li-bókosi
brush	bbulasho	brashi	bulási
hospital	cipitolo	hospitali	(hó)sípitali
hotel	hotela	hoteli	hótelí

<u>English</u>	<u>Tonga</u>	<u>Swahili</u>	<u>Matengo</u>
messenger	masinja	masinja	másinza
nurse	nesi	nesi	nêsi
police(man)	mupulisa	polisi	pólisi
satan(←Hebrew)	satani	shetani	li-setâni
torch	toci	tochi	tôsi

The two approaches are justifiable in as far as they produce results which, when checked against each other, support each other's results. However, when they give us different results, we feel that the 'systematic' approach should be relied upon more than the notional approach, the reason being that, while in the latter approach the data employed is based on mere look-alikes, in the former one prefers rigorous, regular correspondences. In this connection, let us take, for example some thirty-four words in Swahili that Zawawi 1979 indicates as being loans into Swahili from Arabic. These, however, had already been shown by, for example, Guthrie 1967/71 (and Meeussen 1969) as being of indigenous rather than loaned origin. The lexical items in question have been given in Table I. These include, for example, the following:

<u>English Gloss</u>	<u>Swahili</u>	<u>Zawawi 1979</u>	<u>Guthrie 1967/70(CB)</u>
thief	mwizi	liss 'thief'(122)	2025 *-yí b 'thief'
fire	moto	modd 'burning (124)	2138 *-yótò 'fire'
heart	moyo	oyñ 'source' (124)	2144 *-yoyo 'heart'
clothing	nguo	gulho/julho 'garment'(124)	873 *-gùbò 'cloth'
stone	jiwe	wecr 'rock'(125)	176 *-bue 'stone'
eye	jicho	itoof 'extinguish light '(125)	2030 *-yí cò 'eye'

It is possible to demonstrate that the cognates connected with most of the starred forms given in Table I occur in a wide range of languages within the Bantu field, often involving languages that have had little physical contact with Swahili or Arabic. Consider the following cognates of the Swahili words jiwe 'stone' and mw-izi 'thief'. Examples:

STONE

li-bwe	Ombo, C.76 (Congo Kinshasa)
i-we	Sukuma, F 21 (Tanzania)
ji-we	Swahili
li-we	Lwena, K 14 (Angola)
li-bbe	Tumbuka/Kamanga N 21 (Malawi)
e-we	Herero, R 31 (Namibia)
ili-tʃe	Zulu S 42 (South Africa)
ri-bye	Tswana S 51 (Mozambique/ Botswana)
i-wa	Tiv, Z1 East Nigeria

THIEF

mw-ibi	Benga, A 34 (Gabon, Rio Muni)
n-yibi	Kota/Shake, B 25 (Gabon, Congo Brazzaville)
mo-yibi	Bobangi, C 32 (Congo Kinshasa)
umn-ivyi	Rundi, D 62 (Burundi)
omwi-bi	Nyankore, E 13 (Uganda)
umwi-ifi	Hanga, E 32a (Kenya)
nw-ibi	Sukuma, F 21 (Tanzania)
mw-izi	Swahili
mw'iyi	Mbundu, H 21a (Angola)
mw-izi	Lwena, K 14 (Angola & Zambia)

It should be clear from such distributions at the ones above that the words jiwe & mwizi ought to be treated as Bantu in origin rather than non-Bantu loans.

Besides, some of the 'look-alike' members of a pair do not seem to show systematic correspondences in meaning between them, e.g.

<u>Arabic (Zawawi, 1979)</u>			<u>Swahili</u>	
siima	'landmark'	→	kisima	'well'
ṭa'aam/ṭa'aam	'food/taste'	→	mtama	'millet'
buuz	'muzzle'	→	mbuzi	'goat'
liim	'heap/collect'	→	kulima	'cultivate'
ʿoyṇ	'source'	→	moyo	'heart'
jjuuw/jjaww	'sky/atmosphere'	→	jua	'sun'
iṭoof	'extinguish fire'	→	jicho	'eye'
jani	'to pick up/ rake'	→	jani	'leaf'
anaam	'person'	→	kijana	'youth'

Connecting meaning here links Swahili with the rest of Bantu languages, and not with Arabic, in addition to regular phonological correspondences.

2.4. Direct / Indirect Adoptives; Old / Recent Borrowings

2.4.1. Direct versus Indirect Loans

Certain non-Bantu adoptives in Matengo can be assumed to have been borrowed directly from languages other than Swahili by reason of the fact that corresponding forms are non-existent in Swahili, e.g.

Matengo: ki-lípeli 'slate pencil' German: griffen 'to hold'
 tápeli 'slate board' German: Tafel 'slate'

(In both cases, no corresponding Swahili forms exist). Other non-Bantu adoptives may, on the grounds of their peculiar phonological features, be assumed to have been introduced in the language also directly from the source languages, see 2.5.2. for examples. The majority of the loan words dealt with in this Chapter, however, are cases of indirect adoptives, that is items borrowed into Matengo via Swahili.

2.4.2. Old versus Recent Borrowings

It is difficult to identify layers of loans in Matengo, either for adoptives from non-Bantu sources or for those that have resulted from intra-Bantu influence, on the basis of synchronic features specific to such adoptives. Inadequate documentation in Matengo is the major obstacle in the attempt to distinguish old from new loan words. With adequately documented languages, the distinction between old versus recent borrowings becomes much easier to hypothesize: Bynon (1977) illustrates the identification of such a distinction from within the Indo-European languages when she argues, for example, that "while Latin /p/ is uniformly represented in English by /p/, it may be represented by German /p/, /pf/ or /f/. The latter two reflexes, however, are clearly the result of the High German Consonant Shift on an original *p and these sound correspondences taken together indicate that Latin /p/ was always identified with a /p/ phoneme in both English and German. In the case of German, some of the words must have been borrowed early enough for their Latin /p/ to have been equated with the Germanic *p before it underwent the shift, whereas those which have a /p/ in Modern German must have been taken over after the shift had ceased to operate and the phonemic system of German had acquired a "new" /p/..." Accordingly, the following German loans, which are instances of Pre-Shift loans, are, for example, old borrowings:

Pfeffer	'pepper'	→	Latin:	piper
Pflanze	'plant'	→	"	plante
Pfund	'pound'	→	"	pondo
Pflaume	'plum'	→	"	prunum

while the following, which are Post-Shift loans, are instances of new loans:

Palme	'palm'	→	Latin:	palma
Papst	'pope'	→	"	papa
Pech	'pitch'	→	"	pix

Matengo loans from languages other than Bantu, including loans from Arabic (via Swahili), can only to some extent be subjected to the kind of scrutiny proposed by Bynon. For example, some loans containing /d/ in

Swahili have corresponding /l/ in Matengo, while others retain /d/:

Swahili /d/ → Matengo /l/

daftari	→	laputâli	9/10	'exercise book'
dereva	→	lelepa	1/2	'driver'
debe	→	li-lêbi	5/6	'large tin-can'
duka	→	li-lûka	5/6	'shop'

Swahili /d/ → Matengo /d/

mnada	→	n-nâda	3/4	'auction'
akida	→	akîda	1/2	'chief'
ushaidi	→	u-saîdi	14	'witness'
doti	→	dôti	9/10	'pair of cloth'

It is reasonable to suppose that words showing the change /d/ → /l/ would have been borrowed earlier than those which retain /d/.

There is, in addition, some extra-linguistic evidence in the fact that technical terms, e.g. bicycle, cannot antedate the invention of the items in question. In such cases, it is then possible to some extent to distinguish loan words with regard to their having been introduced relatively earlier or later in the language. Accordingly, the following three words under A, for example, seem to have been introduced into the language more recently than the next two words under B:

A

<u>Swahili (< English)</u>	→	<u>Matengo</u>
baiskeli 'bicycle'		basikeli 9/10
motokaa 'motor car'		mutuka 9/10
sinema 'cinema'		senema 9/10

B

<u>Swahili</u>	→	<u>Matengo</u>
serikali 'government' (< Persian)		silikali 9/10
barabara 'road' (< Arabic)		balabala 9/10

However, there are words like sîmu 'telephone/telegraph' which may be regarded as being simply extensions of meaning of probably older loans.

2.5. Accommodation of Lexical Non-Bantu (Swahili) Loans in Matengo

2.5.1. Assimilation Patterns

2.5.1.1. Vowel Patterns in Syllabic Structure

In general, there is a one-to-one correspondence between Swahili vowels and Matengo vowels in non-final position, with the Swahili mid-vowels (e,o) appearing in Matengo as half-open vowels (e [ɛ], o [ɔ]),

e.g. Swahili: chama 'society/club' (< Persian/Hindi) → Matengo: sâma

" deni 'debt' (< Hindi) → Matengo: li-lêni

" dini 'religion' (< Persian) → " lîni

" roho 'soul/spirit' (< Arabic) → " lôho

" duka 'shop/store' (< Hindi) → " li-lûka

In word-final environment, however, all loans, like the rest of the words in the language, display a reduced system of vowel oppositions as explained in section 1.1.1.2.7., above.

In terms of Swahili-Matengo vowel correspondences, this reduced vowel system of oppositions can be represented i/a/u, such that Swahili -i and -e both become -i in Matengo, and similarly -u and -o become -u, while Swahili -a becomes Matengo -a, e.g. gari, debe → li-gâli, li-lêbi; skrubu, kopo → sukulûbu, li-kôpu; and spana → supâna.

In a few cases (4 out of 1,000 words), Swahili i/u corresponds to the half-close vowels, or diphthongs ei/ou, rather than the close vowels i/u: Swahili: pipa 'barrel/casket' (< Portuguese) → Matengo: li-pyêipa

" Wahindi 'Asians' (< Hindi) → " A-hêindi

" ku-piku 'win trick at cards' (< Portuguese) → " kú-peiku

" kubazi 'kind of sandal' (< Arabic) → " li-koubâsi

Words which in Swahili have initial vowel are frequently pronounced in Matengo with an initial h, e.g.

Swahili: idhini	'permission/authority to act' (Arabic)	→	Matengo: (h)isîni
" akiba	'savings' (< Arabic)	→	Matengo: (h)akîba
" elfu	'thousand' (< Arabic)	→	" (h)élupu
" orodha	'list/inventory/table' (Arabic)	→	" (h)olôsa
" ubatizo	'baptism' (< English)	→	" (h)ubatîsu

2.5.1.2. Patterns of Consonant Assimilation

The assimilation patterns displayed by non-Bantu Swahili adoptives in Matengo have been summarized in the following comparative consonant chart. It may be noted from this chart that the morphophonological phenomena in Matengo, described in 1.1.2. above, apply equally to the borrowed words as it does to the indigenous words.

Three environments have been distinguished for Matengo consonants: C which represents the plain consonant, M where a simple consonant is preceded by the syllabic nasal and N where it is preceded by an asyllabic nasal, see 1.1.2.1.3.

<u>Environments</u>	Swahili	<u>Matengo</u>		
	<u>C</u>	<u>C</u>	<u>M</u>	<u>N</u>
	p	p	p	b
	b	b	b	m
	t	t	t	d
	d	l	d	n
	k	k	k	g
	g	g	g	ŋ
	kh <i>[x]</i>	k	-	-
	gh <i>[ɣ]</i>	g	g	ŋ
	f	p	p	b
	v	p	p	b

<u>Environments</u>	<u>Swahili</u>	<u>Matengo</u>		
	<u>C</u>	<u>C</u>	<u>M</u>	<u>N</u>
	s	s	s	z
	z	s	s	z
	th	s	s	z
	dh [ð]	s	s	z
	sh [ʃ]	s	s	z
	j [dʒ]	j	z	n
	ch [tʃ]	s	s	z
	l	l	d	n
	y	y	-	-
		j /V__V	-	-
	w	w	-	-
	h	h	h	h
	m	m	-	-
	n	n	-	-
	n	n	-	-
	n	n	-	-
	r	l	d	n

Significant changes when Swahili consonants are adopted in Matengo involve the sounds d, f, v, z, th, dh, ch and r. Notice must furthermore be taken of certain Swahili loans in Matengo whose assimilation patterns require the insertion of epenthetic semi-vowels between the phonological segments of a CV structure. Only eight cases have so far been found and all involve the consonants p, f and v in the donor language(s), assimilating as pSv in Matengo, in C₁ position:

Swahili: <u>pipa</u>	'barrel/casket' (< Portuguese/Hindi)	→	Matengo: li- <u>pyeipa</u>
" m <u>f</u> adhili	'benefactor' (< Arabic)	→	Matengo: m- <u>p</u> wasîli
" <u>f</u> aida	'profit/gain' (< Arabic)	→	" <u>p</u> wa(h)îda
" di <u>v</u> ai	'wine' (< French)	→	" dî <u>p</u> wa(h)i
" fasheni	'fashion/style' (< English)	→	" <u>p</u> wáseni
" safari	'journey/trip' (< Arabic)	→	" sapwâli

and also:

CB *-púánan- → Swahili: kufanana → kú-pwanana 'to resemble each other'
The regular reflex of *-púánan- in Matengo: kú-hwanana/kú-hwaningana
also exists side by side with the form derived from Swahili.

Note finally that sometimes Swahili d is given an epenthetic preceding n, apparently as a result of backformation, e.g.

Swahili: dirisha 'window' → li-ndilîsa

sidiria 'brassierre' → sindilîa

(cf. Swahili: chandalua 'mosquito net' → sandalû(h)a

randa 'carpenter's plane' → lânda

bendi 'band' → bêndi)

2.5.1.3. Morphology: Noun Classes of Adoptives

The majority of nouns loaned from Swahili into Matengo retain their Swahili nominal class membership. Many of these nouns lack class prefixes in both Swahili and Matengo, and consequently enter into noun classes 9/10 in both languages:

<u>Source</u>	<u>Swahili</u>		<u>Matengo</u>		<u>Gloss</u>
Aramaic/Arabic	kofia	NC 9/10	kopîa	NC 9/10	hat
English	supana	9/10	supâna	9/10	spanner
Hindi	duka	5/6	li-lûka	5/6	shop
Portuguese	meza	9/10	mêsa	9/10	table
German	shule	9/10	sûli	9/10	school
Arabic	binamu	1/2	binâmu	1/2	cousin
Arabic	kitabu	7/8	ki-tâbu	7/8	book
English	koti	5/6	li-kôti	5/6	coat/shirt
Persian	bahati	9/10	bahâti	9/10	luck/chance

The following are noteworthy exceptions:

<u>Source</u>	<u>Swahili</u>		<u>Matengo</u>		<u>Gloss</u>
Hindi/Arabic	embe	NC 9/10	sêmbi/ki-yêmbi	NC 7/8	mango
Arabic	juma	5/6	jûma	9/10	week
Portuguese	ubao	14/10	ú-bau	14/4	black board

2.5.2. Tonal Patterns of Non-Bantu Adoptives

Most of the loans in Matengo belong to Tone Class (TC) 4, see 5.1.5. below. Briefly, the nouns in this tone class exhibit, in citation form, a low tone in all their syllables except on the penultimate syllable where a falling tone occurs. Examples of adoptives belonging to this tone class include:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Portuguese	bendera	bendêla	flag
English	-	selêti	slate board
Arabic	sahani	sahâni	plate
Urdu	rupia 'rupee'	lupîja	money
Hebrew	shetani	li-setâni	devil/satan
Aramaic	kibiriti	ki-bilîti	box of matches
Hindi	bangili	bangîli	bangle
English 'flannel'	fulana	pulâna	undervest
Persian	bahati	bahâti	luck/chance
Turkish	turubali	tu lubâli	tarpaulin
Arabic	birika	bilîka	kettle
Hindi	duka	li-lûka	shop
Hindi	chandalua	sandalûa	mosquito net

The majority of two-syllable loans found in the data belong to Tone Class 4a, a sub-class of TC4:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Aramaic	sumu	sûmu	poison
Hebrew	roho	lôhu	soul/spirit
Hindi/Portuguese	chai	sâi	tea
Persian	rangi	lângi	colour
Arabic	haki	hâki	right/justice
Hindi	doti	dôti	length of cloth
Aramaic	sala	sâla	prayer
German	shule	sûli	school
Arabic	nia	nîa	intention
English	boi	bô(h)i	(house) servant

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Persian	kaka	kâka	(elder) brother
English	peni	pêni	pen
Persian	kazi	kâsi	work/job
English	honi	hônî	horn
Persian	randa	lânda	carpenter's plane
Persian	dini	lîni	religion
Persian	pishi	pîsi	dry measure

The prevalence of the tone patterns of TC 4 and TC 4a among non-Bantu adoptives may be explained by the fact that Matengo speakers interpret the Swahili penultimate stress as a high tone, except in the case of loaned verbs where the stress-tone equation is superseded by a more productive and exceptionless rule which govern all the verbs in the language. All verbs of non-Bantu origin, all of which have been loaned into Matengo via Swahili, conform to the normal Matengo verbal behaviour in their tonal characteristics: they all assume the tonal patterns of Tone Class 3 (see 5.1.4.), e.g.

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Arabic	kuhukumu	kú-hukamu(la)	to judge
Persian	kusali	kú-sali(la)	to pray
Arabic	kuhurumia	kú-hulami(la)	to pardon
Aramaic	kutubu	kú-tubu	to repent

The next most widespread tonal pattern among the non-Bantu loans in Matengo is the one associated with Tone Class 3 (see 5.1.4.), as in:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
English	baiskeli	básikeli	bicycle
Persian	serikali	sílikali	government
English	maschine	másini	machine
Portuguese	padre	pátîli	priest
German	-	tápeli	slate board
English	soksi	sókisi	socks/stockings
English	hoteli	hóteli	hotel

Apart from these three frequently occurring tonal patterns, i.e. those of TC 4, TC 4a and TC 3, only five other tonal patterns are displayed by the 'proven' loans in the data:

(i) Quite a substantial number of two-syllable non-Bantu adoptives in Matengo assuming the tonal patterns of TC 5a (see 5.1.6.1.):

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Hindi/Persian	chapa	sāpa	seal/trade mark
Hindi	cheti	sēti	chit/certificate
Arabic	dhambi	sāmbi	sin/offence
English	namba	nāmba	number
Hindi	pesa	pēsa	money
Arabic	saa	sāa	time/watch/ clock/hour
Arabic	zana	sāna	weapons
Arabic	zaka	sāka	offering for religious purposes
English	meli	mēli	mail steamer/ ship

(ii) Three items showing the alternation of TC 1/3, with the nouns involved assuming TC 1 patterns in the singular, but TC 3 patterns in the plural (see 5.1.8. & 5.1.9.):

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Portuguese 'pear'	pera	lí-pela	guava
Arabic	baka	lí-baka	scar
English	maschine	lí-sini	machine

(iii) Two items displaying the alternation of TC 6/5, in a similar way as those under (ii) above:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Persian/Portuguese	bata	li-bāta	duck
Arabic	shuka	li-sūka	bed-shit

(iv) One two-syllable noun belonging to TC 2

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
Portuguese	meza	mēsa	table

and finally,

(v) One item allowing free alternation between TC 1 and TC 4 both in its singular and plural forms:

	<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>	<u>Gloss</u>
	Arabic	barabara	bálabala TC 1	wide road
or	Arabic	barabara	balabâla TC 4	wide road

To summarize, 'proven' adoptives in Matengo usually assume the tonal patterns of TC 4, TC 4a and TC 3. There is a marked resistance for these loaned material to belong to the other tone classes of the language, especially TC 1, TC 2, TC 5 and TC 6.

TC 4 and TC 4a patterns are preferred by such loan words apparently for reasons of their close similarity to the pitch patterns of Swahili words, with their falling tone on penultimate syllable being equated to Swahili stress on penultimate syllables. And for those loans that exhibit initial high tone, the choice of TC 3 could be explained by the fact that, in the various distinguishing environments for the tone classes as presented in 5.1.1. below, TC 3 appears to be closer (in its pitch patterns) to TC 4 than any of the others.

2.5.3. Calquing and Semantic Extension / Change

2.5.3.1. Calquing

Calquing or loan translation has been defined as a process, in linguistic borrowing, of using "the form and meaning of a foreign word, instead of carrying the word over into the recipient language as a unit" (Bynon 1977 : 232). An excellent example in this connection is the Latin word com-passio which is calqued on Greek sym-patheia 'together + suffering' and which has in turn acted as a model for the German loan translation Mit-leid. We have so far found no Matengo words which could be analysed as calques on Swahili.

2.5.3.2. Semantic Extension / Change

Certain adoptives in Matengo exhibit an extension or a change in meaning when compared to the meaning of the forms from which they have been adopted. Swahili meanings may have undergone semantic change from the meanings in the source-languages from which Swahili borrowed them, and the Swahili meanings taken over unchanged into Matengo. Such is the case in the following:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>
Arabic 'parcel/bundle'	roboto 'sack'	li-lobôtu 'sack'
English 'flannel'	fulana 'vest'	pulâna 'vest'
Arabic 'ruler for drawing lines'	mstari 'line'	n-sitâli 'line'
English 'brace'	bisibisi 'screw-driver'	bisibîsi 'screw-driver'
Persian 'many'	kibaba 'dry measure'	ki-bâba 'dry measure'
English/ French 'gazette'	gazeti 'newspaper'	li-gasêti 'newspaper'

Or, the meanings may have been changed on entry into Matengo from those in the donor languages, as in the case of these words, two from Swahili and one from German:

<u>Source</u>	<u>Swahili</u>	<u>Matengo</u>
English : coat	koti 'coat'	li-kôti 'shirt'
Urdu/Hindi : Rupee	rupia 'Indian currency'	lu-pîja 'lots of money'
German: griffen 'to hold'	-	ki-lîpeli 'slate pencil'

Chapter Three

Identification of Putative Adoptives from Intra-Bantu Sources

3.1. Introduction

3.1.1. Background Discussion to Common Bantu

The identification of Bantu loans in Matengo rests heavily on Guthrie's concept of COMMON BANTU.

For over twenty years, Prof. Malcolm Guthrie made a comparative study of Bantu languages in order to provide some framework which would serve for future reference in identifying and classifying them. The result of his work is published in the four volumes of Comparative Bantu (hereafter CpB). Guthrie's work consisted largely in setting up sets of apparent cognates, that is, lists of lexical and morphological items with the same meaning and held together by completely regular rules of phonological correspondences. He was able thereby to construct some 2,000 Common Bantu starred forms (Comparative Series) which formed the basis of his subsequent hypotheses relating to Bantu Pre-history. His approach subsumed two distinct important stages: first, a reconstruction of Common Bantu - an assemblage of starred forms representing the synchronic relationships obtaining among modern Bantu languages - and second, a series of historical inferences relating these abstract forms to hypothetical historical source-items referable to (different stages of) a parent language.

Guthrie believed that by rigorously separating the two stages of his investigation he would avoid any circularity of argument. He believed further that absolute regularity of correspondence would enable him to make a clear distinction between historical cognates and words diffused through loaning or adoption. We have followed a broadly similar approach, but must be ready to admit that the distinction between cognation and adoption is not always very clear.

One product of Guthrie's rigour was that he frequently found himself obliged to set up two or more slightly divergent (or osculant) starred forms with the same meaning, in order to be able to account fully for the full range of forms attested in different languages. For example, 'oil' *-kúṭà and *-gúṭà, the former to account for the forms occurring in a wide range of languages from Cameroon to South Africa, the latter to account for forms occurring principally in East Africa, but also in Cameroon. These include a number of languages where k and g have merged in this environment in a regular way, but the two distinct starred forms are necessary to account for other languages where this merger is not a regular process.

In discussing the historical interpretation of the cases of osculance of this kind, Guthrie found it necessary to introduce the idea of irregular developments or mutations occurring in the history of languages or language-groups (in the case of irregular forms confined to a single language, he refers to the forms as skewed). We have similarly detected many cases of irregularity of this kind peculiar to Matengo or shared by the Eastern Nyasa languages as a group, and have explored the possibility that these irregularities are attributable to the influence of neighbouring languages, or, in other words, that forms or individual words or sound patterns have been 'adopted' by Matengo.

Another possible cause of osculance is a feature described by Coupez (1975) as variability within a single language. He observed that there are frequently cases within a single language in which a single meaning may be expressed by any of a series of words differing only slightly in their phonological shape, for example:

Sanga (L 35) hold lightly :	-kwabul-
	-kwadud-
	-kwadabud-

Rwanda (D 61) become big / fat : -bigagir-

-biragir-

come and go repeatedly: -sirasir-

-siragir-

-sirisimb-

-diridimb-

Cf. Ngoni (N 12) stick to :

-ŋaŋan-

-ŋaŋanil-

-ŋamatil-

mix :

-hanganis-

-hasingan-

In an extreme case, between twenty and thirty words can be found in Rwanda (D 61) expressing the notion of smallness, forming a chain of interrelated forms. This seems to be a manifestation of phonetic play, which is especially frequent in words expressing some kind of sound or movement. Given this kind of variability within a language, it will hardly be surprising if single forms from different languages fail to show exact correspondences. We shall simply annotate as Variability? any skewed correspondences in words with meanings prone to such influence. This includes also basic terms of family relationship, which are apparently universally influenced by the phonetic play of the infant, and are characterised by a repeated stop or nasal consonant (English: daddy/mummy, Swahili: baba/mama, Lingala: tatá/mamá, Bondi, Shambala: taté/mamé, Shambala: taté/mná, and so on).

This chapter is concerned with material relatable to starred forms of Common Bantu; material confined to the Eastern Nyasa languages or extending only to near neighbours of these languages will be considered in the next chapter.

Section 3.2. of this chapter is concerned with the statements of sound correspondences between *CB and Matengo. There are several cases where difficulties in establishing correspondences raise the problem of external influence in an acute form, for instance Matengo (with Manda) is a seven-vowel language, while the majority of surrounding languages, including Ngoni, Yao, Nyanja and Swahili have a five-vowel system. However, Matengo displays a considerable number of forms in which a more open u in other seven-vowel languages corresponds to close u in Matengo rather than the more open ou, and similarly with i corresponding to i rather than ei, although an equal if not greater number of forms preserve the relative distinctions of the seven vowels. It appears that Matengo has been partly, but not completely, affected by the sound-shift merging the higher vowels to produce a five-vowel system from an earlier seven-vowel system. We shall need to examine possible sources of influence in cases like this just as much as in cases of deviation in individual words, which is the concern of section 3.5.

Let us, for the moment, briefly turn to the data upon which most of our discussion is based.

3.1.2. The Data Base

The data upon which this and the next chapters are based is given in Appendix I, q.v. This data was compiled mainly by using the English glosses given in Guthrie's CpB Vol. II. I acted as my own informant for Matengo, but closely checking my own language intuition against that of my wife, to whom Matengo is also her first language. The Manda data used here was supplied by Mr. G.I.T. Haule, a competent mother-tongue speaker from Luilo (see Sketch-map II), while the Ngoni data was elicited from another fluent mother-tongue speaker, Mr. E. Kihwili, whose home village near

Peramiho (see Sketch-map III) is situated within the central area of U-Ngoni. The whole exercise of gathering data involved many hours of elicitation and recording, and was funded by the Central Research Fund of the University of London. Informants were given Guthrie's English glosses in order to supply as many relevant items for comparison as possible from their languages. The Manda and Ngoni forms were then recorded on tapes and subsequently transcribed. Tonal information was also collated for each item in citation form, although later on in the course of this research samples of disyllabic nouns from the three languages were placed in various contexts in order to determine the range of tonal classes possible for each language ; the exercise proved to be a useful basis for the discussion attempted in Chapter 5.

Appendix I is presented in such a way that cognates from the three languages, and where possible from Swahili and other languages, appear side by side for ease of studying common, differentiating and other special features. Relevant starred forms for Common Bantu, Eastern Bantu and Eastern Nyasa have been included. The last two are discussed in the next chapter.

Of the over 2,000 starred forms included in CpB II, III and IV, an estimate of 800 has been found to have relatable entries in the data in hand. Matengo has about 700 reflexes of these 800 Common Bantu forms, Manda has some 480 and Ngoni some 460. In terms of regularity and skewing, the 700 Matengo reflexes divide themselves into something like 640 regular, 60 skewed; Manda has 420 regular and 60 skewed reflexes, and Ngoni 400 regular and 60 skewed.

3.2. Common Bantu Reflexes in Matengo

In the sections that follow, we have re-examined the sound correspondences between Common Bantu and Matengo, first consonant by consonant, and later vowel by vowel, noting and discussing any divergence with Guthrie's statement of the correspondences. We have not found it necessary to distinguish consonant correspondences according to position within the lexical root.

Some of the divergences with Guthrie are attributable to different interpretation of ambiguous facts, some no doubt arise from a difference of dialect sample. Guthrie does not state his source for Matengo, but appears to have used Häfliger 1909, probably, following his normal practice, after verifying through informants its general reliability.

Numbers immediately following a nominal reflex in the Matengo forms below stand for the Nominal Class(es) to which the item belongs; and numbers within brackets refer to its Tone Class(es). See Chapter 1, section 1.2.7.1. for Nominal Classification, and Chapter 5, section 5.1.0. for Tonal Classification.

Before reviewing the segmental sound reflexes of Common Bantu in Matengo, it is useful to present Guthrie's version of such reflexes as a basis for comparison with our own version in 3.2. The following is a copy of Guthrie's summary of C.B. reflexes in this language as given in CpB II, p. 58:

- N.13 Matengo [Tanzania (Tanganyika)]
 (A) *C₁: *p > p[(~j, ~u) > h]; *b > b[(~j, ~u) > h];
 *t > t[(~j, ~u) > h]; *d > d[(~j, ~u) > h];
 *k > k[(~j, ~u) > h]; *g > g[(~j, ~u) > h];
 *c, *nc > h[(~i) > s]; *j > j[(~j) > s]; *nj > nj
 *V₂: Similar to N.11
 *C₂: as *C₁, but *b > β
 Tones: Fully distinctive
 (B) (i) CL3 IP: ñ CL4 IP: mj CL5 IP: lj CL7 IP: sj
 CL8 IP: hj (ii) Gend.11/6,12/13 (*dim*)

Here is an indication of how these correspondence rules should be read: take, for example, *p; Guthrie states that at C₁ (that is in the position of 'first consonant in the radical') CB *p has p as its reflex in Matengo, except if the starred form occurs before the cedilla vowels *j̃ and *ũ where the reflex of *p is h in Matengo.

3.2.1. Segmental Phonemes - Consonants

3.2.1.1. Reflexes of *p

The correspondences of *p may be stated schematically as follows:

*p → p (___*i, ___*u, → h; N ___ → b)

This convention should be interpreted thus: the regular reflex of Common Bantu *p in Matengo is p, except before the 'cedilla' vowels where it is h, and after asyllabic nasals where b is the reflex. This agrees with Guthrie's statement except that he does not mention the treatment after N___. No examples have been found of the sequences *Np_i or *Np_u. Over fifty instances of these three regular reflexes of *p in Matengo have been attested. A small sample of them is given below; nouns are followed by an indication of gender and tone-class, verbs are given in their infinitive form. More examples may be found in Appendix I, q.v.

*p → p

*-pínì	(C.S. 1521)	handle	m̃-pini	3/4 (3)
*-pít-	C.S. 1526)	pass, go ahead, surpass	kú-peita	
*-pét-	(C.S. 1496)	winnow	kú-peta	
*-pánjà	(C.S. 1447)	baldness, bald head	lu-pânza	11/10 (4/4a)
*-pòngó	(C.S. 1581)	he-goat	li-pôngu	5/6 (4)
*-púté	(C.S. 1609)	boil	lí-puti	5/6 (1/3)
*-pépò	(C.S. 1492)	wind, cold	kí-pepu	7 (3)
*-pààp-	(C.S. 1448)	carry (child) on back	kú-papa	

*p → h / ___*i, ___*u

*-pídà	(C.S. 1547)	pus	ú-híla	14 (5)
*-pígà	(C.S. 1548)	cooking/hearth stone	lí-higa	5/6 (1/3)
*-píp-	(C.S. 1559)	suck	kú-hipa	

*-púkù	(C.S. 1619)	mole	ki-hûku 7/8 (4)
*-púm-	(C.S. 1622)	come from/out of	kú-huma
*p → b / *N__			
*-pépò	(C.S. 1492)	cold	ím-bepu 10 (1)
*-pùdò	(p.s. 404)	nose	ím-bulu 9/10 (1)
*-púkù	(C.S. 1597)	kind of rat	ím-bouku 9/10 (1)

3.2.1.2. Reflexes of *b

In CpB II, Guthrie carefully draws a distinction between the reflexes of *b in Matengo at *C₁ and *C₂: b at C₁ but β at C₂. No such distinction was apparent in our data, the realisation being clearly plosive in both positions. Häfliger 1909, the probable source of Guthrie's data, uses the symbol b at C₁ and β at C₂, which may reflect an earlier fricative pronunciation at C₂. We have also not found cases in Matengo that are of *Nb₁ and *Nb₂. Over sixty-five forms illustrating the reflexes of *b in Matengo are given in Appendix I. The reflexes may be given as follows:

*b → b (__*₁, __*₂ → h)

*b → b

*-bìgá	(C.S. 120)	pot	ki-beîga 7/8 (4)
*-béédè	(C.S. 71-73)	breast, udder, milk	lí-beli 5/6 (1)
*-bàd-	(C.S. 12)	shine (of the sun)	kú-bala
*-bòd-	(C.S. 153)	become rotten	kú-bola
*-bútùk-	(C.S. 212)	run	kú-butuka
*-báb-	(C.S. 5)	become bitter	kú-baba
*-búmb-	(C.S. 198)	mould pottery	kú-boumba
*-cób-	(C.S. 363)	lack	kú-hoba
*-dìbà	(C.S. 557)	pool	ki-lìba 7/8 (4)
*-dìbò	(C.S. 606)	stopper	kí-hibu 7/8 (1)

*b → h / __*i, __*u

*-b ₁ mb-	(C.S. 143)	thatch	kú-himba
*-b ₁ mb-	(C.S. 144)	swell	kú-himba
*-b ₁ n-	(C.S. 147)	dance	kú-hina
*-b ₁ ú	(C.S. 216)	ashes	i-lí-hu 5 (4)
*-b ₁ údà	(C.S. 225)	rain	í-hu-la 9 (1)
*-b ₁ n-	(C.S. 231)	harvest	kú-huna

Over sixty-five forms illustrating the reflexes of *b in Matengo are given in Appendix I.

3.2.1.3. Reflexes of *t

*t → t (__*i, __*u → h; *N__ → d)

Note that reflexes of *Nt₁ and *Nt₂ have not been found in Matengo. Over 40 examples illustrating the three regular reflexes formulated above are to be found in Appendix I. Here is a sample:

*t → t

*-t ₁ n-	(C.S. 1740)	cut/collect firewood	kú-tina
*-t ₁ ék-	(C.S. 1700)	draw water	kú-teka
*-t ₁ á	(C.S. 1629)	spittle, saliva	i-má-ta 6 (4)
*-t ₁ óód-	(C.S. 1773)	take, pick up	kú-tola
*-t ₁ údí	(C.S. 1820)	mortar for pounding	lí-touli 5/6 (1/3)
*-t ₁ úp-	(C.S. 1850)	swell	kú-tupa
*-p ₁ t-	(C.S. 1536)	pass, go ahead	kú-peita
*-p ₁ uté	(C.S. 1609)	boil	lí-puti 5/6 (1/3)

*t → h / ____*i, ____*u

*-tìgàd-	(C.S. 1747)	remain	kú-higala
*-tìkí	(C.S. 1749)	stump of tree	ki-hêiki 7/8 (4)
*-tùmbí	(C.S. 1873)	egg	li-hôumbi 5/6 (6/5)
*-tùngò	(C.S. 1878)	civet cat	ká-hungu 12/13 (3)
*-tùp-	(C.S. 1879)	give a gift	kú-hupa

*t → d / N ____

*-ntù	(C.S. 1798)	person	mû-ndu 1/2 (2)
*-ntù	(C.S. 1799)	thing, object	sî-ndu 7/8 (2)
*-témbó	(C.S. 1708)	elephant	ndëmbu 9/10 (5a)
*-tântò	(C.S. 1671)	bridge (at C ₂ in N13)	ń-tandu 3/4 (1)

Reflexes of *d

*d → l (____*i, ____*u, → h; *N ____ → d)

Reflexes of *Nd_i and *Nd_u are not attested. Examples from Appendix I include:

*d → l

*-dìd-	(C.S. 561)	cry, wail	kú-leila
*-dèdù	(C.S. 520)	chin	kí-lehu 7/8 (3)
*-dèk-	(C.S. 524)	leave, abandon	kú-leka
*-dà	(C.S. 443)	louse	i-lî-la 5/6 (4)
*-dàm-	(C.S. 447)	get well, become safe	kú-lama
*-dúád-	(C.S. 677)	become ill	kú-lwala
*-dùk-	(C.S. 693)	plait	kú-louka
*-dùmbù	(C.S. 703)	sister	á-loumbu 1/2 (1)

*d → h / ____*i, ____*u

*-d̥ib-	(C.S. 602)	stop up	kú-hiba
*-d̥ibò	(C.S. 606)	stopper	kí-hibu 7/8 (1)
*-d̥úád-	(C.S. 726)	wear	kú-hwala
*-d̥úát-	(C.S. 727)	wear	kú-hwata
*-d̥ùgùt-	(C.S. 737)	blow bellows	kú-huguta
*-d̥ùt-	(C.S. 749)	pull	kú-huta
*-d̥ùmbik-	(C.S. 746)	bake in ashes	kú-humbika
*-d̥ùndè	(C.S. 748)	cloud	lí-hundi 5/6 (1)

*d → d / *N ____

*-d̥èd̥ù	(C.S. 519)	beard	ín-dehu 10 (1)
*-d̥à	(C.S. 443)	abdomen, inside	m̥ù-nda 18. (5a)
*-d̥ìnd̥id-	(C.S. 580)	wait for (at C ₂ in N13)	kú-leindaleila

Reflexes of *k

*k → k (____*i, ____*u → h; *N ____ → g)

No case of *Nk_y has been found in the data, and only two cases of *Nk_i are attested.

*k → k

*-kídà	(C.S. 1053)	tail	ń-keila 3/4 (3)
*-kén-	(C.S. 1038)	show teeth	kú-kena
*-kádang-	(C.S. 982)	fry, roast	kú-kalanga
*-kómb-	(C.S. 1135)	lick food with fingers	kú-komba
*-kúd-	(C.S. 1190)	grow up	kú-koula

*-bòkò	(C.S. 158)	arm, hand	kú-boku 15/6 (3)
*-cèk-	(C.S. 312)	laugh	kú-heka

*k → h / ____*i, ____*u

*-kí ₃ na	(C.S. 1082)	base of tree trunk	li-hîna 5/6 (4)
*-kí ₃ gé	(C.S. 1079)	eyebrow	i-hîgi 8 (4)
*-kí ₃ nd-	(C.S. 1083)	press down	kú-hindalila
*-kú ₃ -	(C.S. 1249)	die	kû-hwa
*-kúm-	(C.S. 1262)	come from	kú-huma
*-kúmbat-	(C.S. 1267)	hold in arms/hands	kú-humbatila
*-kú ₃ ndò	(C.S. 1272)	knot	li-hû ₃ ndu 5/6 (6/5)
*-kú ₃ pà	(C.S. 1273)	bone	lí-hupa 5/6 (1/3)
*-kú ₃ tà	(C.S. 1278)	oil	má-hûta 6 (3)

*k → g / *N ____

*-kó ₃ ndò	(C.S. 1147)	fight, war	ngô ₃ ndu 9/10 (2)
*-kà ₃ nk-	(C.S. 1012)	shake off	kú-kanga 'push down'
*-kú ₃ nda	(C.S. 1221)	type of pigeon	ngû ₃ nda 9/10 (2)
*-nû ₃ nk-	(C.S. 1386)	smell	kú-nunga
*-yà ₃ nk-	(C.S. 1940)	catch	kú-janga
*-yó ₃ nk-	(C.S. 2135)	suck	kú-jonga

Cases of *Nk₃

*-kí ₃ ngò	(C.S. 1086)	neck	hîngu 9/10 (2)
*-kí ₃ pà	(C.S. 1087)	vein, tendon	hîpa 3/4 (4)

The reflexes of CB *k are represented by some 100 items in Appendix I.

3.2.1.6. Reflexes of *g

*g → g (___*i, ___*u, → h)

No instances of the reflexes of *Ngj and *Ngu have been attested.

*g → g

*-gèni ₃	(C.S. 805)	stranger, visitor	ŋ'-geni 1/2 (1)
*-gàb-	(C.S. 754)	divide, cultivate	kú-gaba
*-gàmbò	(C.S. 771)	affair, court case	lí-gambu 5/6 (1)
*-gàngà	(C.S. 786)	medicine man	ŋ'-ganga 1/2 (1)
*-godud-	(C.S. 843)	straighten	kú-golola
*-gongodo	(C.S. 859)	millipede	li-gongôlu 5/6 (4)
*-goyi	(C.S. 861)	string, rope	ŋ'-goji 3/4 (1)
*-guadi	(C.S. 865)	kind of partridge	ngwâli 9/10 (4a)
*-guduk-	(C.S. 889)	fly	kú-goulouka
*-ngi	(C.S. 809)	other (ADJ)	-ngi

*g → h / ___*i, ___*u

*-gùmbí	(C.S. 910)	dust	lu-hóumbi 11/6 (4)
*-gùnd-	(C.S. 913)	become rotten,	kú-hunda
*-gútà	(C.S. 914)	oil	má-ñhuta 6 (3)

Thirty-five items in Matengo illustrating the reflexes of CB *g have been included in Appendix I.

3.2.1.7. Reflexes of *c

*c → h (s)

Both h and s occur in Matengo as apparent reflexes of CB *c. For some 38 items in Appendix I for which these Matengo reflexes have relatable entries, 17 occur with h and 11 with s (see Table 3.1. at the end of this section) and there seem to be no apparent factors governing the distribution of h and s. In Guthrie's rules of sound shifts, the distribution of s is specified as being conditioned by the vowel following *c, such that *c → s/_i. Otherwise, according to Guthrie, *c → h. However, the unpredictable distribution of s and h found in the data of this study clearly violates Guthrie's rule. The following sample (abstracted from Appendix I) illustrates this indeterminacy of the reflexes of *c :

*c → h

*-cìmb-	(C.S. 340)	dig	kú-heimba
*-cím̀bà	(C.S. 357)	lion	lí-himba 5/6 (1/3)
*-cìng-	(C.S. 358)	rub	kú-hinga
*-cèkò	(C.S. 315)	laughter	lú-heku 11/8 (1)
*-cààm-	(C.S. 256)	move one's residence	kú-hama
*-cábí	(C.S. 240)	witchcraft	ú-habi 14 (3)
*-càk-	(C.S. 258)	drive forward (cattle)	kú-haka
*-càngà	(C.S. 288)	sand, river-bed	ŋ́-hanga 3/4 (1)
*-còòc-	(C.S. 365)	poke in	kú-hosa
*-còngùd-	(C.S. 385)	sharpen to a point	kú-hongola
*-cótùd-	(C.S. 389)	pierce	kú-hotola
*-bìc-	(C.S. 138)	hide	kú-hiha
*-yìncì	(C.S. 514)	pestle (for pounding)	mw-îhi 3/4 (2)

*c → s

*-cínj-	(C.S. 341)	butcher	kú-sinza
*-cèngà	(C.S. 324)	grains	lú-sěnga 11/10 (5/5a)
*-càk-	(C.S. 257)	search	kú-saka
*-càmb-	(C.S. 267)	wash	kú-samba
*-càngà	(C.S. 288)	sand	n-sânga 3/4 (4)
*-còn-	(C.S. 378)	sew	kú-sona
*-cùùj-	(C.S. 409)	strain	kú-suja
*-còòc-	(C.S. 365)	poke in	kú-hosa

It is conceivable that such an h/s distribution in Matengo reflects an earlier distinction in Proto-Bantu, but to support such a hypothesis one would need to find the same distinction in other languages with distinct correspondences for the two starred sounds. An attempt has consequently been made in this study to compare the Matengo reflexes of *c with those of a number of selected languages of the area. The selection has primarily been motivated by Guthrie's Topogram 11 where he makes a diagrammatical representation of the reflexes of *ca. Sample reflexes from three of Guthrie's Bantu Language Zones: G, N and P have been considered. The languages of Zone N include the well-documented Nyanja (Mang'anja) N31c, a neighbouring language for which a word-list was available: Tumbuka N21, and the three Eastern Nyasa (EN) languages which constitute the main focus of the research undertaken here: Manda N11, Ngoni N12 and Matengo N13. Within Zone P, the obvious selection was a fairly well-documented language: Yao P21. Finally, from Zone G, four languages have been added to the list: Unguja-Swahili G42d, which, in its standardized form, exerts considerable influence on Tanzanian languages; Mvita-Swahili G42b (in order to provide contrast to G42d); Hehe G62 and Kinga G65. Relevant documented accounts were available for the last two languages. All together, material from eleven languages has been examined. Occasional references have

also been made to Mpoto N14, (Malawian) Tonga or Siska N15, Matumbi P13 and Makonde P23, whenever it was possible to do so. Sketchmap IV indicates the positional relationship obtaining amongst these languages.

The reflexes in these languages of about forty starred verbal radicals (including some homophones) have been examined and the resulting picture is tabulated in Table 3.1. The choice of verbal radicals rather than nominal radicals is deliberate, in order to simplify description; for the influence of the different nominal class prefixes would in certain cases needlessly complicate the examination of the relationship between the starred *c and its reflexes in these languages.

Ignoring certain radicals which are too restricted in their distribution to contribute much information, what emerges from Table 3.1 and from a careful examination of the whole data of Appendix I is a great deal of variation of the reflexes of CB *c in all these languages. Considering, however, the predominating treatment in these languages we may suggest the following as the normal reflexes of *c :

h	in	G62, G65, N11, N12, N13 and N14
s	in	N21, N31c, and P21
tʃ	in	G42d
t _n	(i.e. dental t)	in G42b
∅	in	P13

This is precisely the treatment that we find in the reflexes of *-cèk- 'laugh', the sole starred form to have reflexes in all languages; the same treatment is found in the reflexes of the following starred forms wherever they are attested:

*-cìmb-	dig
*-cèduk-	boil up
*-cèk-	laugh

*-cààgud-	choose
*-cánc-	sprinkle
*-cób-	lack
*-còm-	pierce, poke in
*-còng-	incite, pare down, sharpen

Certain words can be interpreted as showing basically the same treatment, but with an encroachment of the Swahili realisation $tʃ$ in some of the EN languages. Note that we have shown in Chapter 2 that Matengo (N13) has no $/tʃ/$ or $/ʃ/$, and that borrowings from Swahili with these sounds are assimilated as $/s/$. The words reflecting this distribution are:

*-cínj-	butcher
*-càakad-	become worn out
*-càc-	go sour
*-càng-	mix; become pleased
*-cùùj-	strain, filter

One word displays similar characteristics to those in the last set above, but with s in Manda, where $tʃ$ would be permissible:

*-càmb-	wash
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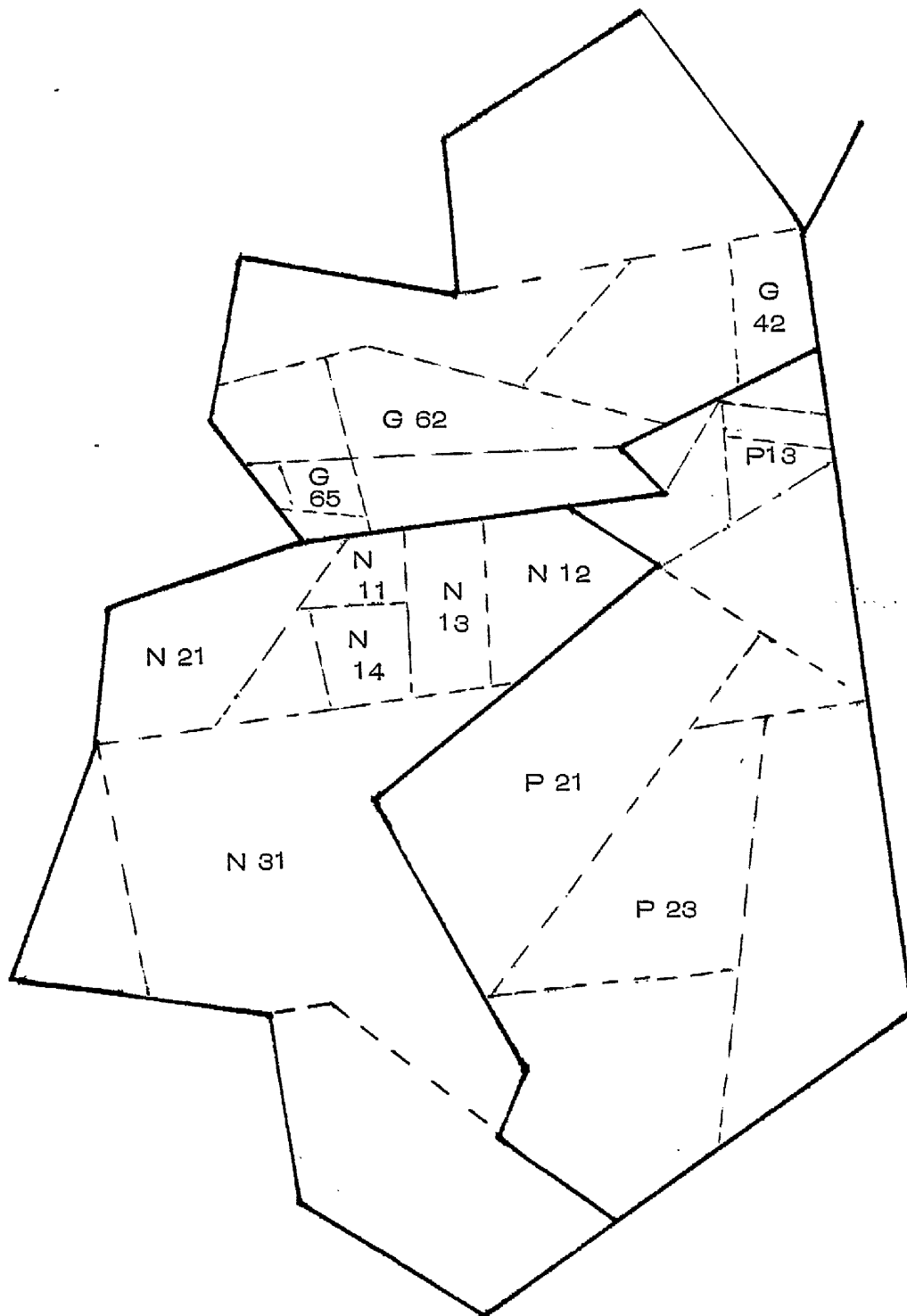
Similar encroachment of Swahili realisations into G60 may perhaps be seen in *-cèng- 'cut', while *-càk- 'chase' and *-cààm- 'move house' show realisations in Swahili (-sak- and -ham-) which do not display the regular $*c \rightarrow tʃ$ reflex, and themselves may be the result of borrowing.

There are a few cases where the sole, or at least prevalent realisation, is with s : *-cèduk- 'become sick', *-cùk- 'wash' and *-càk- 'desire' ($/tʃ/$ in Mvita, $/t/$ in Unguja-Swahili, possibly under Mvita influence), *-cèd- 'slip' (t in Mvita and as a variant in Manda — this word shows considerable variation and may be suspected of displaying 'Variability', see 3.1.1), *-cìd- 'become finished' ($ʃ$ in Mvita), *-còn- 'sew' ($ʃ$ in Unguja, Manda

and Ngoni). *-cùùbid- 'hope' is apparently loaned from Arabic, see Commentary in Appendix I.

The above words constitute the only and hardly adequate grounds for positing a distinct set of correspondences that could be presented by an additional starred consonant.

In the absence of more decisive evidence, I have treated the reflexes of *c as displaying a certain indeterminacy in Matengo between h and s, though with h as the better attested realisation; the reflexes have accordingly been stated *c → h (s) above.



Sketchmap IV : Languages Covered in Section 3.2.1.7.

Table 3.1.

REFLEXES OF COMMON BANTU *c IN SELECTED LANGUAGES

	Swahili (Mwila) G42b	Swahili (Unjupa) G42d	Hehe G02	Kiriga G65	Manda N11	Ngoni N12	Matungo N13	Mpoto N14	Tumbuka N21	Nyanja N31c	Yao P21	Matumbi P13
*-càc- go sour	ʃ	ʃ	h/t	-	ʃ	ʃ	-	-	s	s	s	-
*-càgud- choose	-	ʃ	h	h	h	h	h/s	h	s	s	s	∅
*-càkàd- become worn out	-	ʃ	-	-	ʃ/h	h	h/s	-	-	s	s	-
*-càim- move one's residence	ʃ	h	h	h	h	h	h	h	s	-	s	∅
*-càk- desire, want, prefer, like	ʃ	t	s	-	-	-	-	-	-	-	s	-
*-càk- search for	-	-	s	-	s	-	s	-	-	-	-	-
*-càk chase, drive forward	-	s	h	h	s/h	h	h	-	s	s	s	∅ *P23h
*-càmb- wash	ʃ	ʃ	-	-	s	-	s	-	-	-	-	-
*-cànc- sprinkle	-	-	h	h	-	-	-	-	-	s	-	-
*-càng- be pleased	-	? ʃ	-	-	-	-	-	-	s	s	s	-
*-càng- find	-	-	-	-	-	-	-	-	s	-	-	-
*-càng- meet, assemble	-	-	-	-	-	-	-	-	-	s	-	-
*-càng- mix	-	ʃ	h	h	ʃ/h	-	h/s	-	s	s	w	-
*-céd- 'slip'	t	-	-	-	t/s	s	s	-	-	ts	s	-
*-cédid- come down	-	-	-	-	s/h	h	h	h	-	-	-	-
*-céduk- boil, boil up	-	ʃ	h	-	-	-	-	-	s	-	-	-
*-céduk- become nauseated/stick	-	-	-	-	s	s	s/h	-	s	s	s	-

Note that the symbol - represents the situation where no cognate was available to m, and therefore no sound correspondence could be included for the language in question.

Table 3.1.
(continued)

	Swahili (Mvita) G42b	Swahili (Unguja) G42d	Hehe G62	Kinga G65	Manda N11	Ngoni N12	Matengo N13	Mpoto N14	Tumbuka N21	Nyanya N31c	Yao P21	Matunji P13
*-cèk- laugh	h	ɣ	h	h	h	h	h	h	s	s	s	ø
*-cèng- "cut"	-	? ɣ	h	s	-	-	-	-	s	s	-	-
*-cìd- 'grind'	-	s	-	-	-	-	-	-	-	-	-	-
-cìd-/-cìd- become finished	ʃ	-	s	s	-	-	-	-	-	-	-	-
-cìmb-/-yìmb-) dig	-	ɣ	h	-	h	h	h	h	s	-	-	-
*-cìng- 'rub'	-	s	-	-	-	-	h	h	-	-	-	-
*-cìnj- butcher	-	ɣ	h	-	ɣ/h	h	s	-	ɣ	-	-	-
*-cìnj- pound	-	-	-	-	-	-	-	-	-	s	-	-
*-còb lack, become lost	-	-	-	-	h	h	h	h	-	-	-	-
*-còm- pierce	-	ɣ	h	-	h	h	h	h	-	s	s	-
*-còm- poke in	-	ɣ	-	-	h	h	h	h	-	s	s	-
*-còmud- pull out	-	ɣ	h	-	h	h	h	h	-	-	s	-
*-còn- sew	-	ʃ	-	-	ʃ	ʃ	s	-	s	-	s	-
*-còng- incite	h	-	-	-	h	h	h	h	-	s	-	-
*-còng- pare down	h	-	-	-	-	-	-	-	-	-	-	-
*-còng- sharpen to a point	-	ɣ	-	-	h	h	h	h	s	s	s	-
-cùk-/-cùk- wash	-	-	-	-	s	s	s	-	s	ts/s	s	-
*-cùng- look after	-	ɣ	-	-	-	-	-	-	s	s	s	-
*-cùubid- 'hope'	-	s	-	-	h	h	h	h	-	-	-	-
-cùj-/-cùuc- strain	-	ɣ	-	-	h/ɣ	ɣ	s	-	-	ɣ	-	-

3.2.1.8.

Reflexes of *y

At C₁: *y → ∅ in Nouns
→ j in Verbs

At C₂: *y → j

*ny → ny; and *y → ny / *N__

There are two reflexes of CB *y at C₁ in Matengo : j and ∅. At C₂, *y → j. This situation is the only case found in the data where sound reflexes are distinguished according to position.

The distribution of the reflexes of *y at C₁ is conditioned principally by whether or not the item in which the sound occurs is a noun or a verb, j being the reflex in verbs but ∅ in nouns.

Furthermore, *ny → ny and in cases of items of NC 9/10 like *-yùndò 'hammer' and *-yàmbò 'bait' the reflexes in Matengo is ny.

Examples:

At C₁ in Nouns

*-yícò	(C.S. 2030)	eye	l-îhu 5/6 (2)
*-yídî	(p.s. 511)	darkness	lw-îhi 11 (2)
*-yéđî	(C.S. 1964)	moon, month	mw-êhi 3/4 (2)
*-yádí	(C.S. 1897)	blood	mw-âhi 3 (4a)
*-yáyò	(C.S. 1951)	footprint	lw-ăju 11 (5a)
*-yótò	(C.S. 2138)	fire	mw-ôtu 3/4 (2)
*-yòyò	(C.S. 2144)	heart	mw-ôju 3/4 (2)

*-yúbà	(C.S. 2147)	sun	ly-ôuba 5 (2)
*-yúma	(C.S. 2162)	iron	s-ôuma 5/6 (2)

At C₁ in Verbs

*-yìb-	(C.S. 1989)	steal	kú-jiba
*-yím-	(C.S. 2006)	stand	kú-jeima
*-yìtid-	(C.S. 2094a)	pour	kú-jitila
*-yèp-	(C.S. 1986)	avoid	kú-jepa
*-yánik-	(C.S. 1924)	spread to dry	kú-janika
*-yànk-	(C.S. 1940)	catch (something)	kú-janga
*-yòd-	(C.S. 2105)	gather up	kú-jola
*-yónk-	(C.S. 2135)	suck	kú-jonga
*-yùb-	(C.S. 2145)	skin off	kú-jouba
*-yúgy-	(C.S. 2154)	hear	kú-jougwa

At C₂

*-béyú	(C.S. 96)	seed	ím-beju 9/10 (1)
*-búy-	(C.S. 213)	go back, return	kú-buja
*-bùyú	(C.S. 214)	baobab tree	m-bùju 3/4 (4)
*-gòyè	(C.S. 860)	string, rope	ŋ-goji 3/4 (1)
*-kááyà	(C.S. 1020)	home village	pa-kǎja, ku-kǎja 16, 17 (6)
*-máyi	(C.S. 1288½)	mother	a-mǎji 'wife' 1/2 (4)
*-yàyò	(C.S. 1951)	footprint	lw-ǎju 11 (5a)
*-yòyò	(C.S. 2144)	heart	mw-ôju 3/4 (2)

*ny → ny and *y → ny / *N__

*-kaàny- (C.S. 1006)	trample	kú-kanyatila
*-kónyud- (C.S. 1150)	break off	kú-konyola
*-nyím- (C.S. 1392)	refuse to give	kú-nyima
*-nyàmà (C.S. 1910)	meat	ínyama 9/10 (1)
*-nyàngá (C.S. 1388)	blowing horn	nyânga 9/10 (2)
*-nyàtí (C.S. 1948)	grass	má-nyăhi 6 (5)
*-nyùmbá (C.S. 2168)	house	nyûmba 9/10 (4a)
*-yínyù (C.S. 2080)	salt	mw-înyu 3 (2)
*-yàmbò (C.S. 1920)	bait	nyâmbu 9/10 (4a)
*-yùndò (C.S. 2171)	hammer	nyûndu 9/10 (2)

There are, in Appendix I, over 65 examples of regular OB reflexes in Matengo displaying the treatment of *y at C₁; over 30 nouns and over 35 verbs, and for C₂ there are over 15 reflexes. Over 15 items also display the treatment of *y after asyllabic nasals and that of *ny.

3.2.1.9. Reflexes of *j

*j → s (*N__ → z; *nj → nz)

This formulation differs from Guthrie's but it is well supported by the reflexes found in the data.

*j → s

*-jí (C.S. 936)	village	mũ-si 3/4 (5a)
-jí/-jĩ (C.S. 937 / 943)	water	mâ-si 6 (2)
*-jèng- (C.S. 935)	build	kú-senga
*-jó (C.S. 945)	yesterday	li-su
*-júbà (C.S. 955)	sun	lí-souba 'day' 5/6 (1/3)
*-júkùdù (C.S. 963)	grandchild	ń-soukou(lu) 1/2 (1)
*-júngù (C.S. 966)	whiteman	ń-sûngu 1/2 (4)

*j → z / *N__

*-jíbà	(C.S. 939)	pigeon	ín-zeiba 9/10 (1)
*-jàdà	(C.S. 917)	hunger, famine	ín-zala 9/10 (1)
*-jùgú	(C.S. 916)	groundnut, peanut	in-zóugu 'kind of nut' 9/10 (4)

*nj → nz

*-pa-njá	(C.S. 915a)	outside	pǎ-nza 16 (5a)
*-ku-njá	(C.S. 915b)	outside	kǔ-nza 17 (5a)

17 reflexes associated with *j may be found in Appendix I.

3.2.1.10. Reflexes of *m, *n and *ŋ

There is a one-to-one correspondence between each of these three starred consonant and their reflexes in Matengo, such that

*m → m
 *n → n
 *ŋ → ŋ

Examples:

*m → m

*-mǐd-	(C.S. 1306)	swallow	kú-mila
*-mèd-	(C.S. 1298)	grow, sprout	kú-mela 'germinate'
*-màt-	(C.S. 1288)	daub	kú-mata
*-mòòg-	(C.S. 1317)	shave, cut hair	kú-moga
*-mùdǐ	(C.S. 1329)	torch	lú-muli 11/8 (1)

*n → n

*-nǐèng-	(C.S. 1391)	deceive	kú-nnyenga
*-nèná	(C.S. 1349)	abdomen below the navel	lú-nena 11 (1)
*-nòkù	(C.S. 1369)	flesh	ń-nohu 3/4 (3)

*ŋ → ŋ

*-ŋòmà	(C.S. 1401)	drum	íŋoma	9/10 (1)
*-ŋòmbè	(C.S. 1402)	cattle	ŋómbi	9/10 (2)

3.2.2. Segmental Phonemes - Vowels

3.2.2.1. Reflexes of *ị and *ụ

The reflexes of the CB starred cedilla vowels *ị and *ụ may be stated as follows:

*ị → i and *ụ → u

53 out of 55 entries in Guthrie's data (i.e. 96%) have reflexes in Matengo in which the CB starred cedilla *ị → i in this language. The 2 skewed reflexes are discussed under 3.5.2.1.

Similarly, 35 out of 38 cases in Appendix I confirm that the regular reflexes of *ụ should be taken as u. The 3 skewed cases are discussed under section 3.5.2.2., below.

Examples:

*ị → i

*-bìmb-	(C.S. 143)	thatch	kú-himba	
*-cìmbà	(C.S. 357)	lion	lí-himba	5/6 (1/3)
*-dìbò	(C.S. 606)	stopper	kí-hibu	7/8 (1)
*-gìná	(C.S. 831)	name	li-hĩna	5/6 (6/5)
*-kìpà	(C.S. 1087)	vein, tendon	ŋ-hĩpa	3/4 (4)
*-pìgà	(C.S. 1548)	cooking-/hearth-stone	lí-higa	5/6 (1/3)
*-tìná	(C.S. 1756)	base of tree trunk	li-hĩna	5/6 (4)

*_y → u

*-bún-	(C.S. 231)	harvest	kú-huna
*-dèdù	(C.S. 519)	beard	ín-dehu 10 (1)
*-gútà/-kútà	(C.S. 914/1278)	oil	má-ñhuta 6 (3)
*-kúm-	(C.S. 1262)	come from	kú-huma
*-pùkud-	(C.S. 1618a)	dig up	kú-hukula
*-tùp-	(C.S. 1879)	give gift	kú-hupa

3.2.2.2. Reflexes of *i

There are 68 CB starred forms with *i for which there are putative reflexes in Matengo; in 39 the apparent reflex is ei, in the remaining 29 it is i. The relevant data is given in Appendix I, q.v.

Examples:

*i → ei

-bìgà /-biga	(C.S. 119)	pot	ki-beîga 7/8 (4)
*-dìm-	(C.S. 568)	cultivate	kú-leima
*-jíbà	(C.S. 939)	kind of pigeon	ín-zeiba 9/10 (1)
*-kídà	(C.S. 1053)	tail	ñ-keila 3/4 (3)
*-pìm-	(C.S. 1519)	measure	kú-peima
*-yímb-	(C.S. 2009)	sing	kú-jeimba

*i → i

*-cínj-	(C.S. 341)	butcher	kú-sinza
*-dìbà	(C.S. 557)	pool, well	ki-lîba 7/8 (4)
*-kín-	(C.S. 1063)	dance	kú-kina 'play games'
*-pínì	(C.S. 1521)	handle	ñ-pini 3/4 (3)
*-tín-	(C.S. 1740)	cut	kú-tina 'collect firewood'
*-yídjà	(C.S. 1993)	darkness	lw-îhi 11 (4a)

The numerical difference between the totals of the two types of reflexes of only 10 items is not sufficient for us to draw firm conclusions regarding regularity and skewing. Even the attempt to treat verbal and nominal items separately does not appear to be useful in providing us with clues about regularity of sound correspondences: 22 starred verbs have reflexes in ei in Matengo, against 17 in i; and 17 starred nominal items have reflexes in ei against 12 in i. In all these cases the reflexes containing ei dominate, but only by an insignificant majority.

With regard, therefore, to the reflexes in Matengo of *i, there is, as in the cases of *c above and *u below, 'doubling' of reflexes such that both ei and i must simultaneously be regarded as constituting possible regular reflexes of *i in the language.

Consequently, as it is not possible in this case to determine regularity and skewing, *i cannot be usefully employed in the exercise of identifying individual putative Matengo loans from intra-Bantu sources (see 3.5.2.3.).

3.2.2.3. Reflexes of *u

As in the case of *i just discussed, the regular reflex of *u in Matengo is not readily obvious. There seem to be two distinct types of reflexes: ou and u.

114 starred forms containing *u have been found in the data: 57 of them having Matengo reflexes in which *u → ou, and 57 in which *u → u, see Appendix I. Similar proportions are observed if we consider nominals and verbals separately. The items illustrating the indeterminate reflexes of *u in Matengo include the following:

*u → ou			
*-búmb-	(C.S. 199)	mould pottery	kú-boumba
*-cúbì	(C.S. 399)	leopard	kí-houbi 7/8 (3)
*-dùbà	(C.S. 681)	flower	lí-louba 5/6 (1)
*-gùduk-	(C.S. 899)	fly	kú-goulouka
*-túdí	(C.S. 1820)	mortar for pounding	lí-touli 5/6 (1/3)
*-yùb-	(C.S. 2145)	skin off	kú-jouba

*u → u			
*-búdì	(C.S. 185)	goat	ím-buhi 9/10 (1)
*-bútuk-	(C.S. 212)	run	kú-butuka
*-búy-	(C.S. 213)	go back	kú-buja 'return home'
*-dúm-	(C.S. 696)	bite	kú-luma
*-júngù	(C.S. 966)	whiteman	η-sûngu 1/2 (4)
*-kùtú	(C.S. 1243)	ear	li-kûtu 5/6 (4)
*-tùp-	(C.S. 1850)	swell	kú-tupa

This 'doubling' or indeterminacy of the reflexes of *u, like those of *c and *i, is a significant peculiarity with regard especially to the statements we would like to make about regularity versus skewing. The 'doubling' impinges upon the whole question of the methodology we are attempting to develop here in order to identify putative adoptives of intra-Bantu sources in Matengo, since the distinction between regularity and skewing of reflexes of Common Bantu in this language is crucial in this work. Regular reflexes are taken as pointers to inherited material in the language, while skewed reflexes are interpreted as indicating loan suspects whose possible sources could be traced to languages in which 'similar' cognates occur. The 'doubling' of the reflexes of *i and *u makes the regular/skewed distinction impossible to determine.

Table 3.2: Common Bantu Reflexes in Matengo

CB	Environment	<u> </u> *i, <u> </u> *u	<u> </u> V	N <u> </u>
*p		h	p	mb
*b		h	b	mb
*t		h	t	nd
*d		h	l	nd
*k		h	k	ng
*g		h	g	ng
*c, *nc		h (s)	h (s)	-
*y	at C ₁ in Nouns		∅	
	at C ₁ in Verbs		j	
	at C ₂		j	
				ny
*j			s	
				nz
*m			m	
*n			n	
*ŋ			ŋ	
*i	i			
*u	u			
*i	i			
*u	u			
*a	a			
*e	e			
*o	o			

Table 3.2.a. The Sources of Matengo Consonants

<u>Matengo</u>		<u>Common Bantu</u>
h	--	*p, *b, *t, *d, *k, *g, *c / ___*y, *c
mb	--	*p, *b / *N__
nd	--	*t, *d / *N__
ng	--	*k, *g / *N__
nz	--	*j / *N__
p	--	*p
b	--	*b
t	--	*t
l	--	*d
k	--	*k
g	--	*g
s	--	*j, (*c)
j	--	*y at C ₁ in Verbs, and at C ₂
ø	--	*y at C ₁ in Nouns
ny	--	*y / *N__

3.3. Common Bantu Reflexes in Manda (N11) and Ngoni (N12)

Guthrie (in CpB II, pp 57-58) treats Manda and Ngoni as having broadly similar reflexes of Common Bantu. This study bears out the general truth of Guthrie's observation, although some of the details regarding our rules of correspondences differ from those of Guthrie. Below is a brief outline of the segmental reflexes of Common Bantu in both languages. Supra-segmental (tonal) reflexes are given in Chapter 5.

3.3.1. Segmental Phonemes : Consonants

*p → p (___*_i, ___*_y → f) (Cf. 3.2.1.1)

*-pém_ibá millet, eleusine má-pemba (N11, N12)

*-p_igà cooking-/hearth-stone lí-figa (N11, N12)

*-p_ykò bag m_i-fuku (N11, N12)

*b → b (___*_i, ___*_y → f) (Cf. 3.2.1.2.)

*-bàd_y rib lú-vafu (N11, N12)

*-b_ic- hide kú-fiha (N11, N12)

*-b_ydà rain fûla (N11); fûra (N12)

*t → t (___*_i → s; ___*_y → f) (Cf. 3.2.1.3)

*-támà cheek lí-tama (N11, N12)

*-t_inà base of tree trunk lí-sina (N11); chi-sina (N12)

*-t_yn- desire kú-funa (N12)

*-t_yp- give gift kú-fupa (N11)

*d → (___*_i → s; ___*_y → f) (Cf. 3.2.1.4)

*-dòmò lips / mouths mí-lomo (N11, N12)

*-dèk- leave kú-leka (N11, N12)

*-d_ik- bury kú-sika (N11, N12)

*-d_yndè cloud lí-fûndi (N11, N12)

*k → k (___*i → s; ___*u → f) (Cf. 3.2.1.5.)

*-kááyà	home village	lí-kaya	(N11, N12)
*-kímà	mush	sîma	(N11, N12)
*-kínà	base of tree trunk	lí-sina (N11); chí-sina (N12)	
*-kú-	die	kû-fwa	(N11, N12)

*g → g (___*i → s; ___*u → f) (Cf. 3.2.1.6.)

*-gòyì	string, rope	lú-goyi	(N11, N12)
*-gìd-	abstain	kú-sila	(N11, N12)
*-gùbà	bellows	mí-fuva	(N11, N12)
*-gùmbí	dust	lu-fûmbi	(N11, N12)

*c → h (s) (Cf. 3.2.1.7.)

*-cábì	witchcraft	ú-havi	(N11, N12)
*-cèk-	laugh	kú-heka	(N11, N12)
*-cím̀bà	lion	lí-himba	(N11, N12)
*-còni	shame, shyness	sôni	(N11, N12)
*-cèd-	slip, come down	ku-sélela	(N11, N12)
*-cààm-	move house	kú-hama	(N11, N12)

*y → ∅ in Nouns at C₁

→ y in Verbs at C₁ (Cf. 3.2.1.8.)

→ y at C₂

*-yádì	blood	mw-âsi	(N11, N12)
*-yòyò	heart	mw-ôyo	(N11, N12)
*-yánik-	spread to dry	ku-yánika	(N11, N12)
*-yìnam-	bend over	ku-yínama	(N11, N12)
*-búy-	go back home	kú-buya	(N11, N12)
*-kááyà	home village	lí-kaya	(N11, N12)

*j → s (N__ → nj)

*-jèng-	build	kú-senga (N11, N12)
*-júkúdu	grand-child	sókoulou (N11)
*-jùngú	whiteman	ŋ-sòungou (N11)
*-jàdà	hunger, famine	njàla (N11, N12)
*-jìbà	kind of pigeon	njêiva (N11)

The reflexes of CB *m, *n and *ŋ are m, n and ŋ, respectively. (Cf. 3.2.1.10 and skewed forms at 3.5.1.10.).

3.3.2. Segmental Phonemes : Vowels

Manda, like Matengo, is a seven-vowel language, while Ngoni is a five-vowel language like Swahili. CB reflexes of *i_ɨ and *i and of *y and *u merge in Ngoni as i and u. In Manda as in Matengo *i_ɨ and *y become i and u, while *i and *u show 'doubled' reflexes as ei and i and as ou and u, with approximately equal instances of the high and diphthongised realisations.

*a, *e and *o are realised as a, e and o in Manda and Ngoni as in Matengo.

Unlike Matengo, Manda and Ngoni maintain their full range of vowel contrasts in final position. This is not, however, without exception, see 3.4.6 below.

3.3.3. Summary of Common Bantu Reflexes in Manda and Ngoni

The following is a tabulated summary of the CB reflexes in Manda and Ngoni as outlined in the preceding two sections.

Table 3.3. Common Bantu Reflexes in Manda and Ngoni

CB	Environment	*i	*u	V
		___i	___u	___V
*p		f	f	p
*b		f	f	v
*t		s	f	t
*d		s	f	l
*k		s	f	k
*g		s	f	g
*c				h (s)
*y	at C ₁ in Nouns			∅
	at C ₁ in Verbs			y
	at C ₂			y
*j				s
	N___			nj
*m				m
*n				n
*ŋ				ŋ
*i				i (in Ngoni)
				ei, i (in Manda)
*u				u (in Ngoni)
				ou, u (in Manda)
*i				i
*u				u
*a				a
*e				e
*o				o

3.4. Miscellaneous Problems in Establishing Regular Reflexes and Systematic Skewing

We have so far attempted to establish the regular reflexes of CB in Matengo, Manda and Ngoni. The next stage of our discussion ought to deal with irregular or skewed reflexes as well as those exhibiting extraneous phonological features. But before we look into such irregular forms, we need to point out that certain features occur recurrently in the data such that their special significance to the process of establishing regularity versus skewing cannot be ignored. We will attempt, in the following sections, to show how a number of such features are handled in the process of establishing regular reflexes and systematic skewing.

3.4.1. Divergent Extension Vowel

For some 15 items in the data (in Appendix I), the comment 'Divergent Extension Vowel' (or simply: 'Ext. Vowel') is made, e.g.

kú-tut <u>a</u> muka	boil up	(cf. CB *-tùt <u>u</u> muk-, N12: ku-tut <u>u</u> muka)
kú-tet <u>a</u> me <u>k</u> a	tremble, shake	(cf. Swahili: ku-tet <u>e</u> me <u>k</u> a)
kú-hok <u>a</u> nyola	prod, poke in	(cf. N11 and N12: ku-hok <u>o</u> nyola)
kú-keil <u>a</u> buka	go back	(cf. N12: ku-kil <u>i</u> wuka)
kú-hal <u>a</u> bika	break down	(cf. Swahili: kuhari <u>i</u> bika)
kú-sikat <u>a</u> ika	become sad	(cf. Swahili: kusiki <u>i</u> tika)

There appears to be a rule in Matengo reducing all vowels between the radical vowel and the penultimate vowel (exclusive) to a. Compare:

(a)	kú-senga	to build
	kú-sengela	to build for
	kú-sengeka	to be capable of being built
	kú-sengalela	to build around
	kú-senganela	to build for each other

(b)	kú-linga	to look (at)
	kú-lingila	to look on behalf
	kú-ling <u>a</u> lila	to watch
	kú-ling <u>a</u> <u>l</u> alila	to use something for watching
(c)	kú-lola	to watch, see
	kú-lolela	to cheat by looking at and copying someone else's work
	kú-lol <u>a</u> lela	to watch (a show, dance,...)
	kú-lol <u>a</u> <u>l</u> alela	to use (something) for watching
(d)	kú-pula	to blow
	kú-pulila	to blow for
	kú-pul <u>a</u> lila	to blow out air onto the fire-place

An insignificant number of extension forms with 'divergent vowels' occurs in Manda and Ngoni, possibly as a result of contact with Matengo:

Manda:	ku-keil <u>a</u> wuka	to go back (cf. Ngoni: ku-kil <u>i</u> wuka)
Ngoni:	ku-hal <u>a</u> bika	to break down (cf. Swahili: kuharibika)

The Matengo items annotated as having 'Divergent Extension Vowel' all exhibit this rule, and are therefore regarded as being fully regular reflexes.

3.4.2. Final Composite Vowel

Appendix I includes reflexes in Matengo of CB starred forms with final composite vowel (i.e. a sequence of two unlike vowels). The general feature exhibited by such reflexes is the non-realisation of the final component vowel, such that *-CVV# → -CV# ; e.g.

*-píà	burnt grass(land)	→	u-lûpi
*-tòndùè	star	→	lu-tôndu
*-bùè	stone	→	í-li-bu
*-búa	dog	→	jana-kâ-bu
*-kùìkùì	hiccups	→	ki-ngwêiku
*-dí-	eat	→	kû-la
*-pápatì-	carrass	→	kú-papaha
*-tùè / *-tú	head	→	m-mû-tu

This suggests a rule $*VV \rightarrow V$ whose existence is further confirmed by the lack of final composite vowels in words borrowed from Swahili, e.g.

<u>Swahili</u>			<u>Matengo</u>
kichujio	strainer	>	kí-suji
kibanio	clothes' peg	>	kí-bani
ufunguo	key	>	u-pungû
kilazio	hair brush	>	kí-lasi

We will, therefore, regard Matengo items in Appendix I which are reflexes of CB starred forms, but lacking the final composite vowels, as regular reflexes of the CB forms in question.

3.4.3. Optional Deletion of Final -la and -ha Syllables

There is an optional rule in Matengo reducing word-final -Vla or -Vha to -V. This rule applies only to polysyllabic stems in the data:

m-byágalila	broom	~	m-byágali
li-toúmbeila	kind of ape	~	li-toúmbei
li-pegêla	kind of beer	~	li-pegê
kú-jeitakeila	agree, answer	~	kú-jeitakei
kú-sekula	cut	~	kú-seku

kú-kombala	become thin	kú-komba
kú-papaha	feel with the hand	kú-papa
kú-pembeha	appease	kú-pembe
kú-jumuha	awaken	kú-jumu

Compare these items with the following without reduced alternants:

kú-papa	carry on the back
kú-komba	lick pot with fingers
kú-koula	grow up
kú-beila	boil up
kú-piha	bring out
kú-bouha	take away, remove
lí-pela	guava
li-bwéha	hyena

The reduced forms are the more commonly attested among speakers. In Appendix I, we have marked the forms that usually occur in reduced form by bracketing the final -la or -ha, e.g. m-byágali(la), kú-papa(ha), etc.

3.4.4. Deverbatives

There are a number of cases in which nominal reflexes considered by themselves would be skewed, but which can be regarded as derivatives of verbal radicals which correspond regularly with starred CB radicals, e.g.

lú-jeimbu song, cf. *-yímb- sing, *-yímbò song
as contrasted with:

lí-joka snake, cf. *-yókà snake

Both items here are skewed with regard to *y. The expected forms ought to be **lw-eimbu and **ly-oka, respectively. The phonological discrepancy in lú-jeimbu could be ignored since the underlying verb kú-jeimba is a regular reflex of CB *-yímb-.

We have, accordingly, treated deverbatives as regular, where their verbal bases are regular reflexes of CB, and skewed where such bases are skewed.

3.4.5. Dahl's Law

Dahl's Law, a dissimilation process affecting voiceless segments in successive syllables, resulting in the voicing of the first of such segments, has been found to apply to three items in the Matengo data:

*-pákat-	hold in arms	→	kú-pagata
*-kùkut-	blow bellows	→	kú-hugutila
*-tùkut-	perspire	→	kú-tuguta 'itch'

This is not Dahl's Law in its usual form, since it is the second syllable of the radical that is affected and not the first. However, the data also includes alternative forms to two of these items:

*-pákat-	hold in arms	→	kú-pakata
*-kukut-	blow bellows	→	kú-hukatila

Dahl's Law is thus not regular in Matengo; its application to the three forms above must have resulted from external influence.

Some 15 forms in Manda/Ngoni appear to have been subjected to Dahl's Law:

*-táko	buttock	→	lí-daku	(in both languages)
			cf. lí-taku	(in Matengo)
*-táku-	chew	→	ku-dákula	(in both languages)
*-kupik-	cover up	→	ku-gubákila	(in both languages)
			cf. kú-kupika	(in Matengo)
*-pàap-	carry	→	kú-baba	(in both languages)
			cf. kú-papa	(in Matengo)
*-tàaté	father	→	dâdi	(in both languages)
			cf. a-tâti	(in Matengo)

*-pót-	twist, twine	→	kú-bota (in both languages) cf. ku-pota (in Matengo)
*-tétè	reed	→	lí-dete (in both languages) cf. lí-teti (in Matengo)
*-kàtí	inside	→	mú-gati (in both languages) cf. ŋ-kâti (in Matengo)
*-tátù	three	→	(vá)-datu (in both languages) cf. (á)-tatu (in Matengo)
*-pít-	pass, go past	→	kú-beita (in both languages) cf. kú-peita (in Matengo)
*-píp-	wipe off infant's excreta	→	kú-beipa (in Manda) → kú-bipa (in Ngoni) cf. kú-peipa (in Matengo)
*-tòpè	mud, wet soil	→	lí-doupi (in Manda) cf. lí-toupi (in Matengo)
*-takà	soil, earth	→	lí-daka (in Manda)
*-pákud-	extract honey	→	ku-bákula (in Ngoni)
*-tùkut-	perspire	→	ku-túguta (in Ngoni)

However, the number of counter-examples to such forms is so great that Dahl's Law cannot be said to apply regularly in either Manda or Ngoni. The counter-examples include the following:

*-kít-	act, do	→	kú-keita (in Manda) → kú-kita (in Ngoni)
*-tòókí	banana	→	lí-tôki (in both languages)
*-tétid-	cackle	→	ku-tétela (in both languages)
*-ték-	draw water	→	kú-teka (in both languages)
*-pát-	hold	→	kú-pata 'get' (in both languages)
*-pít-	pass	→	kú-peita (an alternative to <u>kú-beita</u> in Manda)
*-pété	ring	→	pête (in Manda), pêti (in Ngoni)
EN *-ket-	cut	→	kú-keta (in both languages)
EN *-kotok-	cease	→	ku-kótoka (in both languages)

Items in Matengo, Manda and Ngoni which have been annotated Dahl's Law ? in Appendix I will be treated as exhibiting an extraneous feature that might have been adopted from languages in which Dahl's Law applies regularly. Bennett 1967 shows Dahl's Law extending to Group G60; this is confirmed for Kinga and Hehe by Guthrie, CpB I.2. pg. 51. More recently, Nurse 1977, pg. 92, confirms its occurrence in Bena, e.g. in such words as -bota 'twist', -datu 'three' and -gati 'inside'. Such languages may be held responsible for the application of Dahl's Law in the EN languages.

3.4.6. Miscellaneous EN Developments

There are, in the data, some 35 starred forms which have reflexes in the EN languages, but unlike other reflexes these recurrently exhibit significant discrepancies vis-à-vis expected reflexes to the CB radicals in question. The most common divergency occurs at V_2 in nouns:

*-dùndè	cloud	»	lí-hundi
*-pángò	cave	»	lí-pāngu
*-puté	boil	»	lí-puti
*-tántò	bridge	»	ń-tandu
*-témbó	elephant	»	nděmbu

Distinctions of vowel height in final position are not maintained in Matengo, so it is possible to see cases where Manda and Ngoni display a high final vowel whose CB has *-o or *-e as affected by the same process that has neutralised the distinction in Matengo, which nevertheless does not apply uniformly in Manda and Ngoni, and so must be put down in some sense to Matengo influence. Cases of this kind have been annotated: N11/12: V_2 in Appendix I.

Other mutations include, for example, epenthetic developments in the EN forms, as in:

*-yùdá frog >> ly-ungûla

or reduplications confined to the EN area, as in:

*-káda piece of charcoal >> li-kalákala

or semantic changes, as in

*-kóm- hit with hammer >> kú-koma 'kill'
>> kú-komana 'fight'

or other eccentric developments for which explanation is difficult:

*-kùdù big >> -kouloungu

We have handled such cases in Appendix I usually by setting up *EN forms in addition to *CB, with the note: CB >> EB or CB >> EN or explicit commentary.

3.5. Identification of Putative Loans from Intra-Bantu Sources

3.5.0. Methodology

The methodology for identifying loans which we are attempting to develop here subsumes three important stages. The first involves the process of establishing regular correspondences of the reflexes of Common Bantu in various languages, as exemplified in sections 3.2. and 3.3., above. The next stage calls for the examination of those items which contain skewed (and especially extraneous) features in the borrowing language in order to determine the nature of the irregularities exhibited and subsequently offer an explanation for the skewing. The third stage, which we hold to be as important as the first two, concerns the indication of possible source language(s) for the items with skewed or extraneous phonological features before we accept that the items in question are putative adoptives.

To illustrate this methodology by using the Matengo data given in Appendix I, we have first worked out the rules of sound correspondences between Matengo and three selected languages (Manda, Ngoni and Swahili), occasionally looking into Yao, Mpoto, Nyanja, etc. We have especially studied the Common Bantu reflexes in Matengo, Manda and Ngoni and have thereby been able to establish what forms are to be classed as regular (and therefore apparently indigenous) in the three languages. We have also included Common Bantu reflexes in Swahili, as given by Slavikova and Bryan 1973, since we have also referred to Swahili as a potential source language of some of the intra-Bantu loans adopted by Matengo. We realise that the more languages become involved in the course of this identification exercise, and the fuller our picture of distribution, the safer will be the conclusions we may draw as to possible origins and sources of adoption.

At the second stage of our Methodological Approach, we have examined skewed reflexes in Matengo and especially those that contain phonological features extraneous to the language. We have assumed that such skewing constitutes the basis for suspecting potential candidates for loaning — except where other more persuasive explanation is possible. The second and third stages have been given in sections 3.5.1. and 3.5.2. below. Other types of skewing have been shown in section 3.5.3.

Having established skewing in Matengo, we have not been too readily persuaded to conclude that such skewing ought immediately to be linked with the concept of borrowing unless the skewed form can be associated with a particular source language. This connection between skewing in Matengo and an indication of some provenance for the skewed form is an important third stage of our identification methodology; for we maintain that unless some provenance for a loan suspect is given, the notion of borrowing cannot be confirmed.

Loan suspects in Matengo have usually been matched up with assumed indigenous (i.e. inherited) forms in Manda, Ngoni, Swahili, and other potential donor languages in order to determine the type of borrowing relationship existing between Matengo and these languages. Any cognates found in these other languages are of interest here only to the extent that they are relatable to the process of identifying borrowed material in Matengo as its source. For, if what is typical of Ngoni, for example, happens to be the exception in Matengo, it will be assumed here that the exception in Matengo is a valid candidate for borrowing into Matengo from Ngoni. A form in a donor language is regarded here as being a typical cognate with which an exceptional form in Matengo may be

linked if it can be shown to be a regular reflex of Common Bantu and share surface resemblance with the Matengo item (disregarding of course normal Extension Forms unless these are exceptionally eccentric in shape). The notion of surface resemblance is also an important clue towards the identification of adoptives since languages normally borrow surface features or forms, rather than the underlying patterns of the system of a language. And surface resemblance refers also to the situation in which two cognates differ in a phonological segment, but the difference can be explained in such a way that the sound in question in one language is consistently normalised as a particular sound in the other. Consider the following cases :

	<u>CB</u>	<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili</u>
(a)	*-píǵà	cooking stone	lí-higa	lí-figa	lí-figa	figa
	*-koópǵ	slap	ǵlí-kôpiǵ	li-kôfi	li-kôfi	kofi
(b)	*-dǵb-	stop up	kú-hiba	ǵku-zibaǵ	ǵkú-zibaǵ	kuziba
				ǵkú-hibaǵ		
	*-dǵgò	load	ǵń-siguǵ	ń-sighu	ǵń-ziguǵ	mzigo
(c)	*-pǵk-	dig up	kú-huka kú-hukula	ku-fúkula	-	kufukua
	*-pǵkò	bag	ǵń-pukuǵ	ń-fuku	ń-fuku	mfuko
	*-pǵd-	blow with mouth	ǵkú-pulaǵ	ǵkú-pulaǵ	ǵkú-pulaǵ	ǵkupulizaǵ

(Note that skewed forms are here enclosed in slanted square brackets)

In (a), the regular reflexes of CB *pǵ are Matengo: *pǵ → hi, but Manda, Ngoni and Swahili: *pǵ → fi, as illustrated in the reflexes of *-píǵà. The sound /f/ is extraneous in Matengo, and all words borrowed into Matengo that contain /f/ in the source language are consistently normalised with /p/ instead of /f/. This assimilation process was illustrated earlier when we were discussing non-Bantu adoptives in Matengo which

were borrowed normally via Swahili (see Chapter 2). Matengo li-kôpi is a possible adoptive from any of the three languages cited above. The skewed Matengo item resembles those of Manda, Ngoni and Swahili in the way described above.

In (b), a similar relationship of surface resemblance can be shown to exist for *d_ɨ whose regular reflexes are as follows: Matengo: *d_ɨ → hi, but Manda/Ngoni: *d_ɨ → si and Swahili: *d_ɨ → zi. The reflexes of *-d_ɨb- are thus regular in Matengo and Swahili, but skewed in Manda (and for both reflexes in Ngoni). The skewed reflex ń-sigu is thus a putative adoptive from either Manda or Swahili but not from Ngoni, whose form is not a regular reflex of Common Bantu although it shows surface resemblance to the Matengo form (since z in words borrowed into Matengo is normalised as s, as it has been shown in Chapter 2).

In (c), *p_ɨ → hu in Matengo, but *p_ɨ → fu in Manda, Ngoni and Swahili, as seen in the reflexes of *-p_ɨk- and *-p_ɨkò above. The two skewed Matengo items differ from each other in that, while the reflex of *-p_ɨkò can be associated with the notion of borrowing from Manda or Ngoni or, most likely, from Swahili (given the f > p normalisation as noted in (a) above), the skewed reflex of *-p_ɨd- in Matengo is a less likely case of borrowing, since the starred form has irregular reflexes in all the potential source languages referred to here. We have therefore only surface resemblance without any indication that the form in one language or another is earlier as we might have inferred had it been regular. Consequently, kú-pula cannot be regarded as a proven adoptive in Matengo until its source is indicated in some way; kú-pula might be identified as an adoptive if more languages were included in this study.

Our methodology insists that an indication of provenance for a skewed form is a necessary condition for the firm identification of putative loans in a language, although we may sometimes note that other phonological systems admit sounds extraneous in the language being examined.

We have, under sections 3.5.1. and 3.5.2. below, considered over 50 skewed reflexes in Matengo, attempting to assess, for each item, whether or not its skewing can plausibly be linked with the concept of borrowing from within the Bantu languages. We have considered the skewed items under the segmental phonemes in connection with which they are skewed. Some of these items are skewed in more than one way, e.g.

[kú-hasima] borrow, lend ← *-yàdim-, which is skewed both at *y and at *d, or

[kúsakula] chew ← *-tákun-, which is skewed at *t, *ky and *n. Such forms will be treated in more than one section below but will be counted only once in the inventory of skewed reflexes of Common Bantu in Matengo.

3.5.1. SKEWED ITEMS BY CONSONANT

3.5.1.1. *p (Regular Reflexes: *p → p; — *i, *u → h)

There are seven skewed reflexes involving starred forms with *p, followed in every case by *i or *u. In five cases we find p instead the expected h, and in two *p has developed to s before *i, see Table 3.4. below:

Table 3.4. Reflexes in Matengo Skewed at *p

Gloss	CB	Matengo	Manda	Ngoni	Swahili, etc.
paddle	*-káǵ	[u-káǵ]	ngâfi / ngâhi	-	kafi Cewa: ŋ-kafi
slap	*-koópǵ	[li-kôpi]	li-kôfi	li-kôfi	kofi
resemble	*-pǵán-	[kú-pwanana]	ku-hwaníngana	ku-hwánana	kufanana
blow with mouth	*-pǵd-	[kú-pula]	[kú-pula]	[kú-pula]	[ku-puliza]
bag	*-pǵkò	[m̥-puku]	m̥-fuku	m̥-fuku	m̥fuko
read	*-pǵóm-	[kú-soma]	[kú-soma]	[kú-soma]	kusoma
knife	*-pǵú	[kí-su]	-	-	kisu

Except in the Data Appendix (i.e. Appendix I), skewed reflexes will be enclosed in slanted square brackets.

(i) *-kàpì → [u-kâpi] paddle

The expected reflex of *-kàpì in Matengo is the unattested form **u-kahi, with *pi → hi (cf. the skewed reflex in Manda [ngâhi]). The reflex [u-kâpi] may be linked with Manda ngafi, Swahili kafi or Cewa (N31b) ŋ-khafi which are regular reflexes of CB *-kapi. These three reflexes also display resemblance with [u-kapi], given that fi is normalised as pi in Matengo, as shown in Chapter 2. The Swahili and Cewa forms are closer in shape to the Matengo skewed item than the Manda form. It is therefore more reasonable to regard [u-kapi] as a possible adoptive from Swahili or Cewa.

(ii) *-kóópì → [li-kôpi] slap

The expected reflex of *-koopì in Matengo is **li-kohi. The starred form has reflexes in Manda, Ngoni, Swahili and Cewa. Guthrie, CpB III:300, observes that the Cewa entry in his list together with that of Kamba (E55) could be regarded as loans from Swahili despite the fact that they display regular correspondences. If we extend that observation to include Manda and Ngoni, we will then have to regard Swahili as being the only and perhaps most plausible source of the skewed Matengo cognate. [li-kôpi] is thus apparently a putative loan and most likely from Swahili.

(iii) *-púánan- → [kú-pwanana] resemble each other

There are in Matengo two regular forms with the meaning of 'resemble each other, become alike', these are ku-hwanana (which is similar to the skewed cognate in Ngoni [kú-hwanana]) and ku-hwanangana (with a cognate in Manda ku-fwaningana). ku-hwanana has been quoted by Guthrie, CpB IV:79, as a regular

reflex of $*-p\acute{u}ánan-$. The skewed reflex $\angle k\acute{u}-pwanana \rangle$ is the more commonly used among speakers than the other two and may have been adopted from the Swahili regular reflex *kufanana*, since loans from Swahili with /fa/ are normalised as /pwa/ as has been shown in Chapter 2, e.g.

<u>Swahili</u>		<u>Matengo</u>
<u>safari</u>	journey	<u>sapwâli</u>
<u>mfadhili</u>	benefactor	<u>mpwasîli</u>
<u>faida</u>	profit	<u>pwa(h)ida</u>

$\angle k\acute{u}-pwanana \rangle$ is thus presumed here as being an adoptive from Swahili, and that the *-pwa-* contained in the adoptive is simply the usual normalisation of *-fa-* in Matengo, in which language the sequence *fa* is excluded.

(iv) $*-p\acute{u}d-$ \rightarrow $\angle k\acute{u}-pula \rangle$ blow with mouth

In section 3.5.0. we pointed out that this starred radical which has skewed reflexes in all the languages under our investigation is associated with the type of skewing in Matengo that may not readily be linked with adoption in the language, since no cognate from any of the languages studied here can be linked with it as a possible source of the Matengo form $\angle k\acute{u}-pula \rangle$. Given, thus, no indication of provenance for the skewed item in Matengo, we can say no more than simply observe that no explanation is, so far, available to us for its skewing. The inclusion of more languages in our research would perhaps help to explain the status of $\angle k\acute{u}-pula \rangle$ vis-à-vis the concept of loaning.

(v) $*-p\acute{u}k\grave{o}$ \rightarrow $\angle m\acute{p}-puk\acute{u} \rangle$ bag

The loan status of the Matengo skewed reflex of $*-p\acute{u}k\grave{o}$ was also referred to in 3.5.0. above. $\angle m\acute{p}-puk\acute{u} \rangle$ can apparently be linked with the regular reflexes of $*-p\acute{u}k\grave{o}$ in Manda, Ngoni,

Swahili and Cewa. The $f > p$ normalisation is a regular rule for borrowed words in the language. We may consequently assume [m̥-puku] to be a strong candidate for borrowing in Matengo from any of the four languages given in the Table above, but most likely from Swahili. [m̥-puku] in Matengo refers more to modern bags and to pockets in trousers and shirts, while its doublet in the language [ŋ-hâku] , apparently a skewed reflex of *-capo, refers to the more traditional leather bags. [ŋ-hâku] has cognates in Manda and Ngoni as well as in Mpoto and Yao. These doublets in Matengo perhaps help to indicate that the form used to refer to the more modern items in the cultural history of the people, i.e. [m̥-puku] , is more recent in the language, thus confirming our suspicion of its being a loan.

[m̥-puku] is thus presumably an adoptive from intra-Bantu sources.

(vi) *-p[ɔ̃]óm- → [kú-soma] read

The expected reflex here is ku-hyoma, a form which is attested in Matengo but with the meaning 'become sad'. *-p[ɔ̃]óm- has skewed reflexes in Manda, Ngoni, Mpoto and Mwera (P22). The Matengo form is apparently a loan from Swahili or Yao which have regular reflexes of *-p[ɔ̃]óm-. Guthrie, CpB IV:64, includes the skewed Matengo and Mwera forms in his list of skewed reflexes of *-p[ɔ̃]óm- and observes: "This apparently localized C.S. is apparently due to a source-item in the East in the Bantu period. Most, if not all, of the skewed items in the footnotes seem to be due to intrusion from Swahili G42, which was probably relatively recent, since the sound-shift *pio > co must have taken place before loaning occurred".

We could also possibly regard the Matengo and other skewed EN forms as having been loaned from Yao, since in that language the reflex of $*-p\acute{o}m-$, ku-syoma, is regular. The cluster /sy/ is not permitted in the EN languages — hence any borrowing with /sy/ will be assimilated by having the /sy/ reduced to /s/: thus ku-syoma in Yao becoming kú-soma in Matengo, Manda and Ngoni.

(vii) $*-p\grave{u}$ \rightarrow $\int k\hat{i}-su \int$ knife

The skewed reflex in Matengo has no cognates in the other two EN languages or in neighbouring languages. The only available relevant cognate is the Swahili kisu. Matengo $\int k\hat{i}-su \int$ may thus be presumed to be an adoptive from Swahili. The Matengo form is one of the doublets in the language bearing this meaning, the other one being the EN reflex, m-pâmba which occurs in Manda, Ngoni, Mpoto and Yao. While m-pâmba in Matengo is primarily meant to refer to large knife-type objects normally made locally in traditional style, $\int k\hat{i}-su \int$ generally means 'pocket knife' or other imported types of knives usually purchased from shops. The presence of doublets is often an indication that one of the words involved is an adoptive of some sort, and in this case $\int k\hat{i}-su \int$ is presumably an adoptive from Swahili.

3.5.1.2. $*b$ (Regular Reflexes: $*b \rightarrow b$; $___*i, *u \rightarrow h$)

Three items in Appendix I display skewing associated with $*b$. These are shown in Table 3.5., with cognates in other languages.

(i) *-dùbà → /li-uwa/ flower

The expected reflex of *-dùbà in Matengo is li-louba, which is in fact attested in the language and refers to the type of flowering associated with trees and long-stalked plants, such as maize and millet. The doublet /li-ûwa/ is used to refer to cultivated garden flowers like roses, lilies, tulips and so on. Cognates of li-louba are li-louva in Manda and u-luβa in Yao. A skewed form /li-ûwa/ is attested in Ngoni and, like the skewed Matengo form shows resemblance to Swahili ua, itself a reflex of *-dùbà, since /ba/ in Matengo corresponds to /wa/ and /va/ in Manda and /wa/ or /βa/ in Swahili. Swahili is thus the presumed source of /li-uwa/ in both Matengo and Ngoni.

(ii) *-yíbà → /mw-íha/ thorn

The expected reflex of *-yíbà in Matengo is **mw-iba, which is not attested in the language. The /ha/ in the skewed form, /mw-íha/, could only occur as a result of being a reflex of *ca. Two of the cognates of /mw-íha/ in the Table above are skewed and the only regular reflex of *-yíbà is the one in Manda, mw-iva, with /va/ displaying no resemblance whatsoever to the /ha/ in Matengo. The eccentric skewing of /mw-íha/ cannot therefore be linked with the notion of borrowing from the languages considered.

(iii) *-gòbì → /ngõsi/ skin

The expected reflex of *-gòbì is the unattested form **ngohi. The only cognate to /ngõsi/ is the skewed Swahili form /ngozi/, the expected reflex in Swahili being ngovi, which Guthrie, CpB III:221, gives as attested but extinct. Both ngozi and ngovi are given as currently attested by the authors of Kamusi, 1981 (pg. 214).

There is a surface resemblance between the two skewed forms, with Swahili /zi/ usually being normalised as /si/ in Matengo. Since, however, the Swahili form is not a regular reflex from CB and may thus itself be of secondary origin, we cannot safely regard Swahili as the ultimate source of the Matengo form. The status of the skewed form in Matengo, /ngõsi/, as a loan cannot therefore be determined.

Table 3.5. Reflexes in Matengo Skewed at *b

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
flower	*-dùbà	/li-ûwa/	lí-louva	/li-ûwa/	ua
thorn	*-yíba	/mw-íha/	mw-íva	-	mwiba
skin	*-gòbì	/ngõsi/	-	-	/ngozi/

3.5.1.3. *t (Regular Reflexes: *t → t; *i, *u → h)

Four skewed reflexes of starred forms with *t are set out in Table 3.6. below. Three involve realisation of *t as s (two before *i), and one a realisation of *t as p (before *u).

Table 3.6. Reflexes in Matengo Skewed at *t

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
chew	*-táky ₃ -	/kú-sakula/	/ku-dákula/	/ku-dákula/	kutafuna
slip	*-tìedid-	/kú-selela/	ku-tyélela	ku-tyélela	kuteleza
forest	*-tìtù	/ń-situ/	ń-situ	m-sîtu	msitu
teach	*-túnd-	/kú-pundisa/	ku-fúndisa	ku-fúndisa	kufundisha ku-fúndisha

- (i) *-tákyun- → /kú-sakula/ chew

The expected reflex of *-tákyun- in Matengo is the unattested form **ku-tahuna, with *t → t, *ky → hu and *n → n. No language in our study has a form displaying any resemblance to either the the expected unattested form above or the attested skewed reflex /kú-sakula/. The Manda and Ngoni reflexes are skewed at *ku and *n, and exhibit some influence of Dahl's Law: *-tákyun- → /ku-dákula/, as was noted earlier on under section 3.4. Regular reflexes occur in Swahili: kutafuna, Yao: ku-tauna and Nyanja: ku-tafuna, but none of the three bears any resemblance to the skewed reflex in Matengo.

Skewed forms that might attest an osculant *-cákyun- are found in some Zone S languages including Sotho, but these are realised on the surface with lateral fricatives, and so are an improbable source.

Given, thus, no indication of provenance and no detectable resemblance to any cognate, we can only regard /kú-sakula/ as an item that cannot be associated with the concept of borrowing, despite its being irregular in the special way of displaying skewing in three phonological segments within a single reflex. We shall return to it in our discussion of skewing at *ky (3.5.1.5.) and at *n (3.5.1.10.).

- (ii) *-tìédid- / *-tìéd- → /kú-nyelambuka, kú-sele(la)/
slip, slide down

The expected reflexes of these starred forms are **ku-hyela and **ku-hyelela. There is an osculant pair C.S. 1693 *-tèdid- and C.S. 1693a *-tèdidi- of which Swahili, Yao and Nyanja have reflexes: kuteleza, ku-telesya and ku-teleleka, respectively, none of which is relatable to the skewed reflexes in Matengo. The Manda and Ngoni reflexes are irregular. The only regular reflex that

shows some distant resemblance to the Matengo skewed form $\angle ku-sele(la) \angle$ is the Nyanja form ku-tselela, a reflex of CB *-tiedid-. ku-tselela in Nyanja is apparently associated with the skewed reflex $\angle ku-tyélela \angle$ in Manda and Ngoni. The regular reflex in Nyamwanga, ku-sxelemuka, could be the source of the skewed reflex $\angle ku-tyelémuka \angle$ in Ngoni, but not of Matengo $\angle kú-nyelambuka \angle$.

It is possible therefore to regard $\angle kú-sele(la) \angle$ as a putative adoptive in Matengo from Nyanja. But it is not possible to demonstrate, on the evidence there is, that the other skewed reflex in Matengo $\angle kú-nyelambuka \angle$ is an adoptive.

We need also point out that the collection of words with meanings such as 'slide' and 'slip down' must be treated with some scepticism, since the meaning is particularly prone to 'variability' as discussed in 3.1.

(iii) *-t̥t̥ù → $\angle \eta-situ \angle$ forest

The expected form here is *n-hitu. The skewed reflex of *-t̥t̥ù in Matengo, $\angle \eta-situ \angle$, has cognates in Manda, Ngoni, Swahili, Yao and Cewa with all of which it shows considerable resemblance, since /s/ in loan words is usually normalised as /s/ in Matengo. /s/ in Matengo is a regular reflex of *j and rather exceptionally of *c, the latter forming a weaker case of two indeterminate realisations of *c in the language, i.e. *c → h (s), as shown in section 3.2.1.7. above. The skewed form may thus be regarded as an adoptive from any of these five languages, but especially from Manda and Ngoni which are inter-intelligible with Matengo. It is also possible that Matengo, Manda and Ngoni have borrowed their forms directly from Swahili, or that the Matengo form has been adopted from Swahili via Manda or Ngoni.

The suspicion that the skewed form here is an adoptive is further strengthened by the fact that the more commonly used word for 'forest' in Matengo is in fact kí-tengu and the word ń-situ is usually employed to refer to forest-like plantations, introduced into U-Matengo relatively recently by German and Swiss missionaries.

(iv) *-túnd- → /kú-pundisa/ teach

The starred form *-túnd- has two reflexes in Matengo, one regular, ku-hunda, and the other irregular, /kú-pundisa/. The reflex ku-hunda means 'to punish' or 'teach a lesson' in Matengo, as does the reflex of Makonde (P23): ku-hunda 'punish', but unlike that of Yao: ku-unda 'to teach'. The regular reflexes in Manda, Ngoni and Swahili all show resemblance to the skewed reflex in Matengo /kú-pundisa/, with /fu/ usually being normalised as /pu/ in Matengo.

/kú-pundisa/ is thus a potential loan in Matengo, probably from Manda, Ngoni or Swahili.

3.5.1.4. *d (Regular Reflexes: *d → l; ___*i,*u → h)

Eighteen items in Matengo are skewed in respect of *d. Given the exceptionally large number of items in this section, we have found it useful to group them in sets with comparable skewing as follows:

- (a) *d, i.e. before non-cedilla vowels
- (b) *di
- (c) *du
- (d) *Nd, i.e. following homorganic nasals

(a) *d: Before Non-cedilla Vowels

There are three examples in which *d is realised as \emptyset or h at the beginning of the stem or radical, and one in which *d is realised as j in extension position (see Table 3.7.).

Table 3.7. Reflexes in Matengo Skewed at *d

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
flower	*-dùbà	/li-ûwa/	lí-louva	/li-ûwa/	ua
God	*-dùngù	/M-ûngu/	-	-	Mungu
straddle	*-tágad-	/kú-tagaja/	-	-	-
invite	*-dààdik-	/kú-halika/	-	-	kualika

(i) *-dààdik- → /kú-halika/ invite

The expected reflex of *-dààdik- in Matengo is the unattested form **ku-lalika.

The only form resembling the skewed Matengo item is that in Swahili, kualika, which is a regular reflex (*d → \emptyset). As shown under 2.5.1.1., Matengo frequently inserts an (optional) h before a vowel when initial, or preceded by another vowel in loans from Swahili (e.g. Swahili: idhini 'authorisation to act' → Matengo: (h)isini), and kú-halika is therefore a likely Swahili loan.

(ii) *-dùbà → /i-ûwa/ flower

This skewed reflex, /i-ûwa/ has been discussed under *b in section 3.5.1.2. above, where it is shown that the item is a putative loan from Swahili. The fact that the word contains additional skewing [$*d \rightarrow \emptyset$] : a correspondence rule which is regular for Swahili confirms our suspicion regarding borrowing from that language. In addition to the segmental resemblance between the Swahili form and its equivalent in Matengo, /i-ûwa/ has a penultimate high tone which is equivalent in pitch to the penultimate stress pattern of Swahili (see Chapters 2 and 5).

(iii) *-dùngù → /M-ûngu/ God

The expected reflex of *-dùngù in Matengo is **M-lungu, a form similar to Yao: N-lungu and Nyanja: Mu-lungu. Manda and Ngoni have no reflexes of this starred radical. The only regular reflex of *-dùngù which shows resemblance to the Matengo item is the Swahili form Mungu. As in the case of *-dùbà, the \emptyset in Swahili has been taken over into Matengo and occupies the position where /l/ as a reflex of *d is expected. /M-ûngu/ is thus presumed to be a loan from Swahili.

(iv) *-tágad- → /ku-tagaja/ 'straddle'

The expected reflex of this starred radical in Matengo is **ku-tagala — a form similar to Yao ku-tagalala and, though less so, to Swahili kutagaa : a form quoted by Guthrie, CpB IV:87, as a regular reflex of *-tágad-. No reflexes of this starred form have been found in Manda and Ngoni.

We have thus no relatable cognate by which /kú-tagaja/, with its eccentric skewing: [$*d \rightarrow j$], could be identified as a potential adoptive.

Note that /kú-tagaja/ is skewed not only in shape but also in meaning. While the starred radical simply means "straddle", /kú-tagaja/ extends the meaning to refer to "walk uncomfortably with legs spread apart as in the case of a person suffering from syphilis". Note furthermore that /j/ in extension position also occurs in another verb of movement: kú-bagaja "tremble".

(b) *d₃ (Regular Reflex: *d₃ → hi)

There are twelve skewed reflexes in Matengo where Matengo has /si/ corresponding to *d₃ in place of the expected /hi/. In most cases, there is a cognate form in Swahili or Cewa, where the regular form has /zi/, which would be normalised to /si/ in Matengo. In a number of cases, Ngoni has reflexes with /zi/ in place of the expected /si/; /z/ is regarded as extraneous in this language, so that an adoptive source is immediately to be suspected. There is also one skewed form in Matengo in which *d₃ is realised as /ly/ (/l/ being the normal treatment of *d before vowels other than *i or *u).

Table 3.8. Reflexes in Matengo Skewed at *d_ɿ

Gloss	CB	Matengo	Manda	Ngoni	Swahili, etc.
string	*-d _ɿ	ʔú-siʔ	-	ʔnyôsi / wû-zíʔ	uzi
(cow's) milk	*-d _ɿ bà	ʔmá-sibaʔ	lí-siva	ʔmá-ziwaʔ	maziwa
load	*-d _ɿ gò	ʔń-siguʔ	ń-sighu	ʔń-ziguʔ	mzigo
bury	*-d _ɿ ik-	ʔkú-sikaʔ	-	ʔkú-zikaʔ	kuzika
extinguish	*-d _ɿ m-	ʔkú-simisaʔ	ʔkú-simisaʔ	ʔkú-zimisaʔ	kuzima
spirit	*-d _ɿ mù	ʔń-simuʔ	-	-	mzimu
cannon, bee-hive	*-d _ɿ ngà	ʔń-singaʔ	ʔń-zingaʔ	ʔń-zingaʔ	mzinga
weight	*-d _ɿ tù / *-d _ɿ tò	ʔu-sîtuʔ	ʔu-zîtuʔ	ʔu-zîtoʔ	uzito
borrow, lend	*-yàd _ɿ m-	ʔkú-hasimaʔ	-	ku-yásima	kuazima
add to	*-yòngidi-	ʔkú-jongesaʔ ʔkú-hongesaʔ	ku-yóngesa	ku-yóngesa	kuongeza
tear from the eye	*-yícòd _ɿ / *-còd _ɿ	ʔlí-holiʔ	ʔlí-holi / lí-soliʔ	ʔlí-holi / lí-hosiʔ	chozi
turn round, wander about	*-d _ɿ úng-	ʔkú-lyungaʔ	-	-	-

Matumbi: li-oli

(i) *-dĩ → /û-si/ string

The expected reflex of *-dĩ in Matengo is **u-hi. Manda has no reflex of this starred stem. Ngoni has two reflexes, both skewed: the first, /wû-zĩ/, recalls the regular reflex in Swahili: uzi, and is presumably borrowed from this. The second, /nyôsi/, has the skewed reflex of *-dĩ with the phonological shift /u/ > /o/ which is not easy to explain. Swahili uzi and Cewa lu-zi could explain the obviously skewed Matengo form /û-si/, from which languages Matengo may have adopted the item, the /z/ in Swahili and Cewa being normalised as /s/ in Matengo. /û-si/ is thus a putative loan item, most likely from Swahili or Cewa.

(ii) *-dĩbà → /má-siba/ (cow's) milk

The expected reflex of *-diba in Matengo is **ma-hiba, a form which according to Guthrie, CpB III:165, is attested in the language as ma-hiβa. Our own observation does not confirm the existence of that word in Matengo, although it is also quoted by Hafliger 1909. The starred stem *-dĩbà has regular reflexes in Swahili: maziwa and Manda: li-siva. The Ngoni skewed reflex /ma-ziswa/ is apparently the result of Swahili influence on the language, since /z/ is extraneous in Ngoni. The skewed Matengo form /má-siba/ is linked with Swahili maziwa and Manda li-siva, and displays expected resemblances with each of them, i.e. Manda /si/ and /va/, Swahili /zi/ and /wa/ would each be normalised in Matengo as /si/ and /ba/. The Matengo skewed form is thus possibly a loan from either Swahili or Manda, which has perhaps replaced an original Matengo item.

(iii) *-dígò → /ń-sigu/ load

The expected reflex of *-dígò in Matengo is the unattested form **ń-higu. *-digo has regular reflexes in Manda, Swahili and Yao; Ngoni has a skewed reflex which is presumably a borrowing from Swahili mzigo, since /zi/ is extraneous in Ngoni but a regular reflex of *di in Swahili. The skewed item /ń-sigu/ may be presumed to be a loan from Manda, Yao or Swahili, as /si/, /si/ and /zi/ in these languages are normalised as /si/ in Matengo. The changes in the final vowel in Matengo have been explained in Chapter I (see section 1.1.1.2.7., above)

(iv) *-dìk- → /kú-sika/ bury

The expected reflex of *-dìk- in Matengo is **ku-hika. The skewed reflexes of *-dìk- in the Table above, i.e. /kú-sika/ in Matengo and /kú-zika/ in Ngoni both show Swahili influence, since, as previously stated, /zi/ is extraneous in Ngoni and /si/ in Matengo is the usual normalisation of /zi/ in loan words. /kú-sika/ is thus probably a loan from Swahili.

There is, besides, a doublet in the language: kú-taga which is more commonly used than /kú-sika/. This fact confirms even further the status of /kú-sika/ as a suspected adoptive.

(v) *-dím- → /ku-simisa/ extinguish

The expected reflex of *-dím- in Matengo is **ku-hima, which is quoted by Guthrie, CpB III:168, as being a regular reflex of *-dím- in Mpoto (N14). A similar item to the quoted Mpoto form occurs in Matengo as kú-hima(la) but means "to become cold".

The starred radical $*-d_{\text{ɛ}}m-$ has regular reflexes in Manda: ku-símisa, Swahili: ku-zima, Yao: ku-sima and Nyanja: ku-zima. It has a skewed reflex in Ngoni: kú-zima, which is apparently of Swahili origin, as /zi/ is extraneous in Ngoni. The Matengo skewed form is presumably a loan from Manda, Swahili, Yao or Nyanja, given the z/s > s normalisation in Matengo.

(vi) $*-d_{\text{ɛ}}mù \rightarrow \text{[} \hat{n}\text{-s}^{\hat{i}}mu \text{]}$ spirit

The expected reflex of $*-d_{\text{ɛ}}mù$ is $**n\text{-himu}$, a form that is not attested in the language. Guthrie, CpB III : 168, observes that the item is in fact attested in Matengo but is skewed in meaning: 'm-himu 3/4 madness' — the word used with that meaning is ma-sîmu which may be regarded to be another skewed reflex of $*-d_{\text{ɛ}}mù$, in this case skewing being displayed both in shape and meaning. The Swahili form mzimu 'spirit' is a plausible source of adoption. In addition Guthrie, CpB III : 168, reports Swahili kuzimu 'spirit country' which exists in Matengo as ku-simûni, and is especially used in Christian religious ceremonies. This strengthens the suspicion of a Swahili source.

Matengo $\text{[} \hat{n}\text{-s}^{\hat{i}}mu \text{]}$ may be taken as a putative adoptive from either Swahili, Yao or Nyanja in which languages the reflexes are regular and bear surface resemblance to the Matengo reflex (see Table 3.7.).

(vii) $*-d_{\text{ɛ}}ngà \rightarrow \text{[} \hat{n}\text{'-singa} \text{]}$ cannon, beehive

The expected reflex of $*-d_{\text{ɛ}}ngà$ in Matengo is the unattested form $**n\text{-hinga}$. The skewed reflex $\text{[} \hat{n}\text{'-singa} \text{]}$ has cognates in Manda, Ngoni, Swahili, Nyanja and Cewa (N31b). The Swahili reflex is regular; all the others are skewed. Nyanja and Cewa forms are skewed tonally (with regard to $*a$), Manda and Ngoni segmentally i.e. $\text{[} \hat{n}\text{'-singa} \text{]} \rightarrow \text{[} \hat{n}\text{'-singa} \text{]}$. Manda and Ngoni forms contain

the extraneous phonological feature /z/ and are thus putative adoptives, as usual most likely from Swahili. The Matengo skewed reflex can also be presumed to be a borrowing from Swahili, in which language the cognate is not only a regular reflex but bears close surface resemblance to the Matengo skewed form, given the usual /z/ > /s/ normalisation.

(viii) *-dîṭù / *-dîṭò → /û-sîṭy/ weight

The expected reflex of these starred forms in Matengo is **u-hitu. The skewed reflex, like the preceding one, has cognates in Manda: /û-zîṭy/ and Ngoni: /û-zîṭo/. Both are skewed at *dî and contain an extraneous phonological feature /z/, which shows Swahili influence on these languages. Cognates of /û-sîṭy/ are also found in Yao, Tumbuka (N21) and Swahili all of which are regular reflexes of these starred forms and display similarities with the Matengo skewed form. The skewed form may thus be regarded as being a putative adoptive from Yao, Tumbuka or especially Swahili.

(ix) *-yàḍim- → /kú-hasima/ borrow, lend

The expected reflex of *-yàḍim- is **ku-jahima. /kú-hasima/ is skewed both ^{at}*y and at *di. It has cognates in Manda ku-yásima / ku-yasímisa, Swahili: kuazima / kuazimisha and Yao: ku-jasima / ku-asima, all of which are regular reflexes. The regularity of both reflexes in Yao is confirmed by Guthrie, CpB IV: 142. Both ku-yásima in Manda and ku-jasima in Yao show remote similarities with the Matengo form /kú-hasima/. Swahili kuazima and Yao ku-asima are closer in shape to the Matengo form; Matengo frequently inserts an optional h before a vowel when initial (in a stem or radical) or when preceded by another vowel in loans

(see Chapter 2, section 2.5.1.1.), as in:

Swahili:	idhini	authority	Matengo:	(h)isîni
	akiba	savings		(h)akîba
	orodha	list, inventory, tables		(h)olôsa
	kualika	invite		kú-(h)alika

The form /kú-hasima/ can thus be regarded as being a borrowing from Swahili or Yao.

The skewed form has a doublet in the language kú-jahika perhaps another skewed reflex of *-yàdîm-, this one being skewed only at *m. A form similar to kú-jahika is found in Ganda (E15): /-azik-/ , which in that language is skewed tonally (see OpB IV:142). Ngoni has a cognate ku-yáhika. We have, in this work, treated the Matengo and Ngoni forms, kú-jahika and ku-yáhika, as developments in EN displaying divergencies from OB, despite the occurrence of the Ganda item with which the Matengo and Ngoni items are very remotely and perhaps only accidentally related. We have set up an EN starred radical *-yacik- which connects the Ngoni and Matengo forms.

(x) *-yòngidî- → /kú-jongesa/kú-hongesa/ add to

The expected reflex of *-yòngidî- in Matengo is **ku-jongehya. Reflexes of this starred radical are found in Manda, Ngoni, Swahili and Nyanja. /kú-jongesa/ is presumably an adoptive from Manda or Ngoni, with /j/ at C₁ in Matengo having a parallel form /y/ in the two languages. The form of /kú-hongesa/ is consistent with having been borrowed from Swahili or Nyanja, with the /ø/ in the borrowed words being normalised as /h/ as in the case of

/kú-hasima/ above. In both skewed cases in Matengo, the /s/ results from the assimilation of either /s/ or /z/.

(xi) *-yí'còd̥ / *-còd̥ → /lí-holi/ tear from the eye

The skewed reflex in Matengo here is a reflex of the starred stem *-còd̥, rather than that of *-yí'còd̥; however, both Common Bantu stems have been included above in view of the fact that they are osculant starred forms. The expected reflex of *-còd̥ in Matengo would be **li-hohi. Guthrie, CpB III:109, cites as regular reflexes Manda: ma-soli and Matumbi (P13): li-oli, though the Manda form conflicts with both his own and our statements of correspondences. Guthrie considers both cognates as being regular reflexes of the starred stem *-còd̥. The most likely source of the Matengo form here could be Matumbi (P13), granting that the reflex li-oli in that language is regular, as Guthrie asserts.

(xii) *-d̥í'úng- → /kú-lyunga/ turn round, wander about

The expected reflex of *-d̥í'úng- in Matengo is the unattested form **ku-hyunga. There are regular reflexes in several languages: Swahili, Yao, Nyanja and Kikuyu (E51). None has been found in Manda or Ngoni. The only cognate that bears some surface resemblance to the Matengo form is the Kikuyu form -riong-, given that /r/ in borrowed words is usually normalised as /l/ in Matengo, although there is still the need to explaining the shift: Kikuyu: /o/ > Matengo: /u/ in -riong- > -lyung-. Besides the two languages are not geographically proximate enough for borrowing contacts to be likely.

/kú-lyunga/ is thus one of the skewed reflexes in Matengo which cannot with certainty be attributed to linguistic loaning.

(c) *d_y (Regular Reflex: *d_y → hu)

One item is skewed at *d_y: *-d_ym- → /kú-suma/ 'roar, rumble'. No reflexes of *-d_ym- have been found in Manda and Ngoni; there is a regular reflex in Swahili but with a different meaning:

Table 3.9. Reflexes in Matengo Skewed at *d_y

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
roar, rumble	*-d _y m-	/kú-suma/	-	-	kuvuma 'blow' (of wind)

The nearest languages with apparent reflexes containing sibilants which could explain the Matengo form are Nyanja and Shona, where -zuma means 'to groan'. *d_y also becomes /zu/ for instance in Sukuma, Nyamwanga and Shambaa, although no reflexes have been reported. No clear conclusions can be drawn regarding the status of /kú-suma/ as an adoptive in Matengo.

(d) *Nd

The only item with a skewed reflex at *d when preceded by an homorganic nasal is /kú-hanza/ or /kú-wanza/ 'to begin'. These items are skewed also at C₁, where we should expect *y → j; /w/ in this position is extraneous, while /h/ is commonly found in adoptives.

The Swahili form kuanza is consistent with *-y_{and}-, i.e. followed by a causitive extension. Causitives in Matengo are more often made with the extension -h-, so that the occurrence of a form presupposing *-i_y- is doubly suspicious.

3.5.1.5. *k (Regular Reflexes: *k → k; ____*₁, *₃ → h)

There are ten putative reflexes from CB in Matengo which are skewed in respect of *k. In five cases *k >> s before a front vowel: *k is palatilisised before front vowels (becoming variously /tʃ/, /c/ or /s/ in Bemba, Tumbuka, Nyanja, Yao and Zulu; all these sounds would be normalised as /s/ in Matengo. In addition, before *₁, *k → s in Manda, Ngoni and the Hehe group; *k → ʃ. in Swahili. In three other cases *k >> p or b, and there is one case each in which *k >> h before *u and remains k before *₃.

Table 3.10. Reflexes in Matengo Skewed at *k

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
become clever / cunning	*-kéngid-	/kú-senzela/	-	ku-chénjela	Nyanja: -cenjer- Bembā: -cenjel-
grandfather	*-kúúku	/a-hóuku/	-	-	-
bee	*-yúki	/ú-jusi/	/ñjusi / njuchi/	/ú-njuchi/	nyuki Nyanja: njuci
honey	*-yúki	/b-úsi/			
tendon, vein	*-kípa	/ñ-sípa/	ñ-sipa	ñ-sipa / /ñ'-shipa/	mshipa
roast, fry	*-yókí-	/kú-josa/	-	ku-yocha	-
driver-/ army-ant	*-cádàkù	/lu-hálǎbu/	sárafu	sárafu / /hálawu/	Yao: salau
rub off, erase	*-kúút-	/kú-puta/	ku-futa	kú-futa	kufuta
blind person	*-pòkù	/ki-pôfu/	ki-pofu	-	kipo-fu
chew	*-tákuñ-	/kú-sakula/	/ku-dákula/	/ku-dákula/	kutafuna

(i) *-k'engid- → /kú-senzela/ become clever/cunning

The expected reflex of *-k'engid- in Matengo is **ku-kengela. The attested reflex, /kú-senzela/ is skewed both at *k and at *ng, since *k → k and *ng → ng. Cognates of /kú-senzela/ occur in Ngoni, Nyanja, Shona and Bemba (M42). The Ngoni reflex is skewed, the Nyanja, Shona and Bemba reflexes are regular and show surface similarity with the Matengo form, since /c/ or /tʃ/ is normalised as /s/ in Matengo, and /nj/ or /ndʒ/ is assimilated as /nz/ in the language. It is thus reasonable to regard Shona (-chenjera), Bemba or more likely Nyanja as possible sources of the Matengo word /kú-senzela/. The skewed reflex is thus a putative adoptive.

(ii) *-kúúkù → /ā-hōuku/ grandfather

The expected reflex of *-kúúkù in Matengo is **a-kouku. The nearest language reported by Guthrie with a valid reflex is Mambwe kuuku, but this offers no explanation of the mutation *k >> h. We should however be sceptical of skewings involving terms of family relationship given the influence on these terms of 'phonetic play' (see 3.1.1.).

(iii) *-yúkì → /lú-jusi / lú-nzusi/ bee

(iv) *-yúkì → /bû-si/ honey

The expected reflex of both these starred forms would have the stem **-uki; in addition, /lú-jusi/ is skewed at C₁ (we should expect **lu-si), but this is easily explained as a back-formation from the plural for /lú-nzusi/, since /nz/ is the regular morpho-phonemic realisation of /j/ after N (see 1.1.2.1.3.).

*-yúkì 'bee' has skewed reflexes in Manda and Ngoni, but regular reflexes in Swahili, Nyanja and Yao. The skewed EN forms here display external influence, perhaps that of Nyanja or Yao (but not Swahili) on Matengo, Manda and Ngoni. The skewed Matengo reflexes /lú-jusi / lú-nzusi/ are thus putative loans in the language, apparently from Nyanja or Yao.

*-yúki 'honey' has skewed reflexes in Manda, Ngoni and Swahili (uki). Regular reflexes occur in Yao u-uci, Nyanja u-tſi, Shona u-chi, Xhosa (S41) u-busi and Zulu (S42), an obsolescent form u-busi. These five languages could be regarded as possible sources of the Matengo skewed form /b-ûsi/, in that they contain sibilants, /c/, /tſ/ and /s/, which are normalised as /s/ in Matengo. The Xhosa, Zulu and Shona forms could have come into contact with Matengo through the trans-Nyasa captives during the Nguni migration northwards (see 1.3.3.). Nyanja and Yao, being geographically closer to Matengo constitute even more likely sources for the possible borrowing of /b-ûsi/ in Matengo.

(v) *-kípa → /ŋ-sîpa/ vein, tendon

The expected form ŋ-hîpa occurs in the language and is the more commonly used word of this doublet. Guthrie, CpB III:286, includes this form as m-hipa among his examples of regular reflexes of *-kípa. The starred form has regular reflexes in Manda ŋ-sîpa, Ngoni ŋ-sîpa and Swahili mshipa. There are, besides, the Ngoni form /ŋ-sîpa/ which is skewed (and shows Swahili influence in Ngoni, since /ſ/ in Ngoni is extraneous) and the Nyanja reflex ka-tsipa 'elephantiasis' which is semantically skewed. The reflexes in Manda, Ngoni and Swahili show surface resemblances to the skewed Matengo form. It is possible to consider /ŋ-sîpa/ as a putative loan from Swahili, Ngoni or most likely Manda.

(vi) *-yòk̥- → /kú-josa/ roast

The expected reflex of *-yòk̥- in Matengo is the unattested form **ku-johya. The starred radical has reflexes in Swahili kuoka and Nyanja ku-ot̥ha. These do not show resemblance to the Matengo skewed form. There is, however, a reflex of an osculant C.S. *-yòk̥- in Yao ku-joca which displays surface similarity with the Matengo form /kú-josa/. The alternative reflex of *-yòk̥- in Yao ku-oca does not resemble Matengo /kú-josa/ in the same way. The skewed Matengo form is thus a putative adoptive, its most likely source being Yao ku-joca which shares with Matengo the treatment of *y as /j/.

(vii) *-cádàkù → /lu-hálǎbu/ driver-/army-ant

The expected reflex of *-cádàkù in Matengo is *lu-halahu. The skewed reflex /lu-hálǎbu/ has comparable forms in Manda sárafu, Ngoni sárafu and Yao salau. An alternative form occurs in Ngoni /hálawu/, which is skewed at *kú in that *kú ought to give /fu/ in the language. Of the reflexes of *-cádàkù found in the data, none shows more surface resemblance to the Matengo form than the Ngoni /hálawu/, although one is tempted to associate /lu-hálǎbu/ with the Yao reflex — considering the possibility of speakers interpreting the sequence /au/ as /abu/ by inserting the epenthetic /b/ between the vowels. Since the Ngoni form itself is skewed, it is not possible, on the evidence in hand, to say anything regarding the loan status of /lu-hálǎbu/ as a skewed reflex of *-cádàkù in Matengo.

(viii) *-kùùt- → /kú-puta/ rub off, erase

The expected reflex of this starred form and of two other osculant starred radicals: *-pùùt- and *-tùùt- is **ku-huta in Matengo. Comparable forms to /kú-puta/ are found in Manda, Swahili, Ngoni Yao and Cewa (N31b). All of them are regular and, apart from the Yao reflex, display great similarity to the Matengo word, since /f/ is normalised in Matengo as /p/. /kú-puta/ is thus a putative

adoptive in the language, most likely from Manda, Ngoni, Swahili or Cewa.

(ix) *-pòkù → ʔki-pôfu/ki-pôpuʔ blind person

The expected reflex of *-pòkù in Matengo is **ki-pohu. The starred form has reflexes in Manda and Swahili, in which languages the items are regular reflexes of *-pòkù and show great resemblance with the skewed forms in Matengo. ʔki-pôfuʔ is definitively an adoptive in the language as it contains the sound /f/ which is excluded from the sound inventory of the language, while ʔki-pôpuʔ indicates the usual normalisation of /f/ to /p/. Both forms can be regarded as loan suspects from either Manda or Swahili.

(x) *-tákun- → ʔku-sakulaʔ chew

This form is trebly skewed in Matengo and has already been discussed at 3.5.1.3., above. The retention of *k in this position is not readily explained, although *u in extension vowel position is unusual, so that it is difficult to find parallels. In the absence of any plausible source, the status of this word remains obscure.

3.5.1.6. *g (Regular Reflexes: *g → g; ___*i,*u → h)

There are seven putative reflexes of CB in Matengo which are skewed in respect of *g. In four cases, *g >> s and in some of these reflexes the /s/ showing the usual morphophonemic change to /z/ when preceded by N (see 1.1.2.1.3). In one case *g → h (i.e. *g before non-cedilla vowels). *g also has the reflex /h/ in one case and the reflex /b/ in one other case.

Table 3.11. Reflexes in Matengo Skewed at *g

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili etc.</u>
imitate	*-yíg-	/kú-jiha/	kú-yeiga	ku-iga / ku-igiza	kuiga kuigiza
whole	*-gîma	/-sîma/	/-zîma/		-zima
become clever/ cunning	*-kéngid-	/kú-senzela/	-	ku-chénjela	Nyanja: -cenjer- Bemba: -cenjel-
cotton	*-tóngé	/lí-tonzi/	li-tônji	-	Yao: li-tonje Nyanja: -thondze
cane-/ beaver rat	*-cèngí	/lí-kenzi/	/lí-chenje/	-	Nyanja: n-chenzi
ripen artificially	*-gúnd-	/kú-bundika/ /kú-bundakila/	-	-	-
crocodile	*-gùìnà	/lí-ngwina/	/lí-ngwîna/	lí-gwina	-

(i) *-gùìnà → /lí-ngwina/ crocodile

The expected reflex of *-gùìnà in Matengo would be **li-gwina (cf. the regular reflex of this starred form in Ngoni). The majority of languages that have a reflex of this starred form or of the osculant *-gùènà have reflexes in Class 9; if Matengo had transferred this word from Class 9 to Class 5, we might have expected **li-ngwina; operation of the Ganda Law in Matengo would produce the attested form /lí-ngwina/, but there is no other evidence of the Ganda Law in Matengo, though it applies intermittently in Swahili and is apparent in the Nsenga form gwena. The status of /lí-ngwina/ as a putative adoptive in Matengo cannot thus be explained.

(ii) *-yíg- → /kú-jiha/ imitate

The expected reflex of *-yíg- in Matengo is **ku-jiga which is not attested. There are regular reflexes in Manda: kú-yeiga, Ngoni: kú-yiga/ku-yígiza and Swahili: kuiga/kuigiza. None of these would be normalised in Matengo as /kú-jiha/. We are thus unable to detect any source from which the Matengo form could be borrowed. In the absence of any plausible source, this word cannot be regarded as a proven adoptive.

(iii) *-gĩma → /-sîma/ whole

The expected reflex of *-gĩma in Matengo is the unattested form **-hima. The skewed reflex /-sîma/ is in fact a synonym of -ôha which is the more frequently occurring form in the language. Matengo /-sîma/ has cognates in Manda /-zîma/ and Swahili -zima. The Manda item contains the extraneous phonological segment /z/ and is suspect of Swahili influence. The skewed reflex in Matengo could thus be regarded as a putative loan from Swahili, but not from Manda. The Swahili form is a regular reflex of Common Bantu and shares close similarity with the Matengo form — the segment /z/ (which is extraneous intervocalically in the language) being as usual normalised as /s/.

(iv) *-kéngid- → /kú-senzela/ become clever/cunning

The expected reflex of *-kéngid- in Matengo is the unattested form **ku-kengela. The skewed reflex /kú-senzela/ displays palatalisation both at C₁ and C₂ and has been discussed under *k, section 3.5.1.5., q.v., where it was classed as a putative adoptive most likely from Nyanja.

(v) *-tóngé -> /lí-tonzi/ cotton

The expected reflex of *-tóngé in Matengo is **li-tongi. Reflexes of this starred form occur in Manda /lí-tônji/, Nyanja thonje and Yao li-tonji / m-tonji 'cotton tree'. The Manda reflex is irregular; both the Nyanja and Yao reflexes are regular. /nj/ is excluded in Matengo, and if borrowed into the language, /nj/ is normalised as /nz/. The skewed form in Matengo is thus apparently an adoptive, probably from Yao or Nyanja, but not from Manda.

(vi) *-cèngí -> /lí-kenzi/ cane-rat, beaver rat

The expected reflex of *-cèngí in Matengo is **li-hengi. The form is thus skewed at C₁ and C₂. The Nyanja form is also skewed at C₁, /ce/ implying *ke. The Matengo form cannot be regarded as an adoptive from present-day Nyanja, but could have a common origin with the Nyanja form. The relation of this to the CB form is obscure. The status of the latter is also in the same doubt (Guthrie calls it a "not satisfactory C.S.").

(vii) *-gúnd- -> /kú-bundika / kú-bundakila/ ripen
artificially

The expected reflex here is ku-hunda or **ku-hundika, the latter being similar to the attested skewed reflex in Ngoni: /kú-húndika/. The former, kú-hunda, is in fact attested in Matengo, but like kú-funda in Manda, ku-vunda in Nyanja and Swahili and ku-unda in Yao, it means 'to grow mould' or refers to the earlier stages in the process of rotting.

The other cognates of /kú-bundika / kú-bundakila/: namely ku-fúndisa in Manda, ku-fúndika in Ngoni and kuvundika in Swahili are regular, but show no resemblance to the Matengo form. We cannot, thus, on the evidence available to us, determine the source from which the Matengo skewed reflexes have been derived; and consequently we are unable to regard these forms as proven adoptives.

3.5.1.7. *c (Regular Reflexes: *c → h, (s))

In section 5.2.1.7. above, we treated the regular reflexes of *c noting the indeterminate nature of these reflexes. We had a choice between h and s to be considered as the regular reflex of *c. We argued in favour of h as being the normal realisation of *c in Matengo, but observed that s occurs in such a large number of items in the language that its inclusion as one of the reflexes of *c was justifiable. We therefore concluded that *c → h, (s).

Apart from these realisations of *c, there is also one other reflex of *c, which is eccentric: *c → k. We have only one item in the Matengo data in which this is the case in point:

*-cèngí₅ → /lí-kenzi/ 'cane-rat/beaver rat'. This item has been discussed in the preceding section where it was noted that there were no parallel regular reflexes of *-cèngí₅ that at the same time display surface resemblance to the skewed Matengo item. We noted that we could not determine the possible loan status of /lí-kenzi/ for lack of an indication of its provenance.

3.5.1.8. *y (Regular Reflexes: *y → ∅ (Nouns); → j (Verbs))

There are five skewed reflexes of CB nouns with *y → j, which is the regular treatment in verbs. (Note that *y → j is regular in Yao). There are six skewed reflexes of CB verbs with *y → h.

/h/ is the normal realisation in Matengo of adoptives that are vowel-initial in the source-language. A further rather doubtful skewed reflex shows a mutation *y → ny. We have treated nominal reflexes and verbal reflexes separately.

Table 3.12. Reflexes in Matengo Skewed at *y

Gloss	CB	Matengo	Manda	Ngoni	Swahili, etc.
kind of ape	*-yàní	ʔí-jàníʔ	lí-yani	lí-yani	nyani
spoon, ladle	*-yìkò	ʔkí-jìkúʔ	ʔkí-jìkúʔ	-	kijiko
snake	*-yókà	ʔí-í-jokaʔ	lí-yoka	lí-yoka	nyoka
bee	*-yúkì	ʔí-ú-jusi / lí-ú-zusiʔ	ʔní-úsi / ní-ú-chiʔ	ʔí-ú-njú-chiʔ	nyuki, Nyanja: njuci
bird	*-yùní	ʔkí-juniʔ	ká-yuni	chí-yuni	-
borrow, lend	*-yàdím-	ʔkú-hasimaʔ	-	ku-yásima	kuazima
begin, start	*-yàndí-	ʔkú-hanzaʔ	-	-	kuanza
write	*-yàndik-	ʔkú-handikaʔ	ku-yándika	ku-yándika	kuandika
make oil	*-yèng-	ʔkú-hengaʔ	kú-yenga	-	-
flow	*-yìk-	ʔkú-nyikaʔ	-	-	-
bathe	*-yóg-	ʔkú-hougaʔ	kú-hyogha	-	kuoga Mpoto: ku-hyogha
add to	*-yòngidí-	ʔkú-jongesaʔ ʔkú-hongesaʔ	ku-yóngesa	ku-yóngesa	kuongeza Yao: ku-jooga, ku-oga

(a) *y in Nouns

(i) *-yàni/ → /li-jâni/ kind of ape

The expected reflex of *-yani in Matengo is **ly-ani, with *y → ∅ in Nouns at C₁. There are comparable reflexes of this starred stem in Manda, Ngoni and Yao. Guthrie and Häfliger both report a Matengo form liyani, but this does not occur in current Matengo, although it is the regular form in Manda and Ngoni. /y/ does not occur in Matengo, and one would expect loans from Manda and Ngoni to be normalised with /j/; the Yao form li-jani is another possible source. The skewed reflex in Matengo is thus a putative adoptive from Manda, Ngoni or Yao.

(ii) *-yìkò/*-yìkò → /ki-jîku/ spoon, ladle

The expected reflex of these starred radicals in Matengo is **k-iko. Comparable reflexes occur in Manda, Swahili and Yao. The Manda form /ki-jîku/ is also skewed in that the expected final vowel is /o/ instead of /u/, and that *y → y in Manda and not *y → j. The Yao form ci-iko which is regular looks more like the expected but unattested reflex of *-yìkò/*-yìkò in Matengo: **k-iko. The only regular reflex of these starred forms which shows similarity to the skewed Matengo item is the Swahili form kijiko. We could thus regard /ki-jîku/ as a putative loan in Matengo, most probably from Swahili.

(iii) *-yókà → /lí-joka/ snake

The expected reflex of *-yókà in Matengo is **l-yoka. The starred form has regular reflexes in Manda and Ngoni: lí-yoka and in Yao: li-joka. All the three forms show much resemblance to the skewed Matengo reflex /lí-joka/. We could thus regard the skewed form as a putative adoptive from Manda, Ngoni or Yao.

(iv) *-yúki → /lú-jusi /lú-nzusi/ bee

The expected reflex here is the unattested form ****l-uki**. The skewed reflexes of this starred radical were discussed under ***k**, under section 3.5.1.5. above, q.v., where we considered them to be putative adoptives from Nyanja or Yao.

(v) *-yùni → /kí-juni/ bird

The expected reflex of ***-yùni** in Matengo is ****ky-uni**. Reflexes of this starred forms occur in Manda: ká-yuni, Ngoni: chí-yuni, Yao: ci-juni and Tumbuka (N21): tí-i-yuni. All these reflexes are regular and show great similarity with the Matengo form, since j and y are usually normalised as j in Matengo. /kí-juni/ is thus a putative loan, probably from Yao, Manda, Ngoni or Tumbuka.

(b) *y in Verbs

(i) *-yàdim- → /kú-hasima/ borrow/lend

The expected form here is ****ku-jahima**. The skewed reflex has been discussed under ***d**, section 3.5.1.4. q.v., where we regarded it to be a candidate for borrowing, most likely from Swahili or Yao.

(ii) *-yàndi- → /kú-hanza/ begin

The expected reflex of ***-yàndi-** in Matengo is the unattested form ****ku-jandya**. The skewed reflex /kú-hanza/ has been discussed under ***d**, section 3.5.1.4., q.v., where it was considered to be a potential candidate for loaning, probably from Swahili.

(iii) *-yàndik- → ʔkú-handikaʔ write

The expected reflex of *-yàndik- in Matengo is **ku-jandika. Reflexes of this starred form occur in Manda ku-yándika, Ngoni ku-yándika, Swahili 'kuandika and Makonde (P23) ku-yandika, all of which are regular. There is no surface resemblance between the skewed Matengo form, on the one hand, and, on the other, the reflexes found in Manda, Ngoni and Makonde, since the transfer relationship between /y/ in these languages and /h/ in Matengo is not possible to account for. No parallels occur in Matengo that indicate that loans with /y/ are normalised as /h/. The Swahili reflex however displays similarities that suggest that the skewed Matengo item could possibly be a borrowing from Swahili. As has been shown above in section 2.5.1.1, Matengo frequently inserts an optional /h/ before a vowel when initial or when preceded by another vowel in loans from Swahili. Thus Swahili kuandika would be taken over into Matengo as kúhandika. The skewed Matengo form ʔkú-handikaʔ may thus be regarded as a putative adoptive in the language, probably from Swahili.

(iv) *-yèng- → ʔkú-hengaʔ make oil

The expected reflex of *-yèng- in Matengo is the unattested form **ku-jenga. The skewed reflex ʔkú-hengaʔ means 'to make oil' only in the sense of extracting fat oil from boiling animal fat. The starred form *-yèng- has regular reflexes in Manda kú-yenga, Yao ku-jenga/ku-engá and Nyanja ku-engá. The Manda form and one of the Yao forms, ku-jenga, do not resemble the Matengo skewed form. The other Yao form ku-engá and the Nyanja form ku-engá show some similarity to the Matengo form. ku-engá in Yao and Nyanja contain the sequence -ØV-, which, as shown in our discussion in connection with *-yànd- and *-yàndik- above, could be assumed to have been normalised in Matengo as -hV-. We may thus regard ʔkú-hengaʔ as a putative adoptive in Matengo, probably from Yao or Nyanja.

- (v) *-y₃k- → [/kú-nyika/] flow, come/go down

The expected reflex of *-y₃k- in Matengo is **ku-jika. The skewed reflex [/kú-nyika/] means 'to come/go down' only in the sense of water flowing down. There are no comparable reflexes of this starred radical in any of the languages covered by this research. It is thus not possible, within the methodological framework proposed here, to attempt the identification of this skewed reflex as a possible candidate for borrowing in Matengo.

- (vi) *-yóg- → [/kú-houga/] bathe

The expected reflex of *-yóg- in Matengo is **ku-joga, a form unattested in the language. There are regular reflexes in Manda kú-yoga, Ngoni kú-yoga, Swahili kuoga, Yao ku-jooga or ku-oga and Mpoto, as reported by Guthrie (CpB IV:192), ku-yoxa. As in the cases of *-yànd-, *-yàndik- and *-yèng-, the only forms that resemble the Matengo item here are Swahili kuoga and Yao ku-oga, with their -ØV- sequences being realised as -hV- in Matengo. We may thus consider [/kú-houga/] in Matengo as a putative adoptive from either Swahili or Yao.

- (vii) *-yòngidi- → [/kú-jongesa/kú-hongesa/] add to

The expected form here is **ku-jongehya. The reflex [/kú-jongesa/] is skewed at *d₃, while the other reflex [/kú-hongesa/] is skewed both at *y and *d₃. These reflexes were discussed under *d₃, above, where we regarded both of them to be putative adoptives in Matengo: [/kú-jongesa/] from Manda or Ngoni, and [/kú-hongesa/] from Swahili or Nyanja.

3.5.1.9. *j (Regular Reflexes: *j → s; *nj → nz)

Only one Common Bantu starred form has been found to have a reflex in Matengo that is skewed at *j: *-jìdǎ 'path, way'.

Table 3.13. Reflexes in Matengo Skewed at *j

Gloss	CB	Matengo	Manda	Ngoni	Swahili, etc.
path, way	*-jìdǎ / *-jìdǎ	∫in-délla /	ndélla	njîla / ∫m̃-zila	njia

Manda and Matengo both have skewed reflexes with *j >> d. There are similarly skewed reflexes, as reported by Guthrie, in Mpoto (N14), Mavia (P25) and Rufiji (P12), and a reflex in Makonde (P23) in which *j → d regularly. The Matengo form may plausibly come ultimately from Makonde, but the immediate source could be Manda or Mpoto or another language of the Makonde group.

3.5.1.10. *n (Regular Reflex: *n → n)

One reflex of Common Bantu in Matengo is skewed at *n: ∫kú-sakula ← *-tákyǎ- 'chew'. This item has already been discussed under *t and under *ky, where it is argued that the loan status of Matengo ∫kú-sakula is impossible to assess.

3.5.2. Skewed Items by Vowel

3.5.2.1. *i (Regular Reflex: *i → i)

Only one reflex in Matengo is skewed in respect of *i: ∫ki-héiki ← *-tìkí 'stump of tree'.

Table 3.14. Reflexes in Matengo Skewed at *i

Gloss	CB	Matengo	Manda	Ngoni	Swahili, etc.
stump of tree	*-tìkí	∫ki-héiki	-	-	kisiki

The expected reflex of $*-t_{\text{3}}k\acute{i}$ in Matengo is $**ki-hiki$. There are regular reflexes of $*-t_{\text{3}}k\acute{i}$ in Swahili kisiki, Yao ci-sici and Makonde (P23) lu-hiki. All these forms do not provide us with any clues as to how $*i_{\text{3}} \rightarrow ei$ in Matengo. The provenance of $\angle ki-h\acute{e}i ki \rangle$ thus remains undetermined, and therefore the identification of this skewed reflex as a putative adoptive in Matengo seems to be impossible.

3.5.2.2. $*u_{\text{3}}$ (Regular Reflex: $*u_{\text{3}} \rightarrow u$)

There are three reflexes in Matengo of CB forms with $*u_{\text{3}} \gg ou$ in place of the expected u. They are set out in the following Table:

Table 3.15. Reflexes in Matengo Skewed at $*u_{\text{3}}$

<u>Gloss</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili, etc.</u>
open	$*-d_{\text{3}}ugud-$	$\angle k\acute{u}-hougoula \rangle$	-	-	-
dust	$*-g_{\text{3}}umb\acute{i}$	$\angle lu-h\acute{o}umbi \rangle$	$lu-f\acute{u}mbi$ $\angle lu-h\acute{o}umbi \rangle$	$lu-h\acute{u}mbi$	vumbi
egg	$*-t_{\text{3}}umb\acute{i}$	$\angle li-h\acute{o}umbi \rangle$	$l\acute{i}-houmbi$	$l\acute{i}-humbi$	-

There are no clear indications in the data of a source of adoption which could explain this irregularity. It is possible that it may be seen as a form of hypercorrection, since /u/ in 5-Vowel languages such as Ngoni corresponds both to /u/ and /ou/ in Manda and Matengo. In this connection, it is interesting that Häfliger (and Guthrie) quote a Matengo form lihumbi 'egg' (modern: $li-h\acute{o}umbi$). Häfliger's vocabulary was compiled at Kigonsera, a border mission station between U-Matengo and U-Ngoni (see Sketchmap I, pg. 66), with the aid of at least one Ngoni-speaking informant, on Häfliger's own admission.

3.5.2.3. *i and *u

As we have observed above (sections 3.1.1. and 3.2.2.2. to 3.2.2.3.) Matengo shows an apparent 'doubling' or indeterminacy in the reflexes of *i and *u. There are open reflexes (/ei/ and /ou/) that preserve the 7-vowel distinction of Common Bantu and are presumed to be the main development in Matengo, but the language has been partially affected by the merger of *i + *i and of *u + *u, which has occurred in Ngoni and in most neighbouring language groups except Nyakyusa, Kinga, Matumbi and related languages. While we have not treated individual words that exhibit the simple high vowels as skewed, nevertheless we must ascribe the partial realisations of this sound shift to the same sort of influence (from an uncertain quarter) as that which has led to other intra-Bantu adoptives in Matengo.

3.6. Summary of Skewed Items, Loan Suspects and their Potential Sources

From the discussion attempted under sections 3.5.1. and 3.5.2., above, the emerging picture regarding skewed reflexes of Common Bantu in Matengo can be briefly sketched as follows:

- (a) In all, 59 skewed reflexes have been found in the data.
- (b) Of these 59 skewed items, 20 have been rejected from being candidates for loaning for various reasons, chiefly for lack of a clear indication of source languages to which these putative adoptives may be linked : the discovery of a source that explains the nature of the skewing being an important condition for the firm identification of putative adoptives from intra-Bantu sources. The 20 reflexes are :

<u>Common Bantu</u>	<u>Gloss</u>	<u>Matengo</u>
*-búnd-	ripen artificially	[/kú-bundika / kú-bundakila/]
*-cádákù	driver-/army-ant	[/lu-hálǎbu/]
*-cèngí	beaver-/cane-rat	[/lí-kenzi/]
*-díúng-	wander about, turn round	[/kú-lyunga/]
*-dùgud-	open	[/kú-hougoula/]
*-dùm-	roar, rumble	[/kú-suma/]
*-gòbì	skin	[/ngòsi/]
*-gùinà	crocodile	[/lí-ŋwina/]
*-gùmbí	dust	[/lu-hóumbi/]
*-jìdà / *-jìdá	path, way	[/in-déila/]
*-kúúkù	grandfather	[/a-hóuku/]
*-púd-	blow with mouth	[/kú-pula/]
*-tágad-	'straddle'	[/kú-tagaja/]
*-tákyun-	chew	[/kú-sakula/]
*-tìédid- / *-tìéd-	slip	[/kú-nyelambuka / ku-tyelambuka/]
*-tíkí	stump of tree	[/ki-héiki/]
*-túmbí	egg	[/li-hóumbi/]
*-yíbà	thorn	[/mw-íha/]

<u>Common Bantu</u>	<u>Gloss</u>	<u>Matengo</u>
*-yĩg-	imitate	ʔkú-jihaʔ
*-yĩk-	flow, go/come down	ʔkú-nyikaʔ

- (c) 39 skewed reflexes of Common Bantu in Matengo have been considered putative adoptives in Matengo from languages covered in the data (especially from Manda, Ngoni, Swahili, Yao and Nyanja). These potential candidates for borrowing in Matengo are given in the following list, which also shows the source languages from which the putative adoptives are presumed to have been borrowed :

<u>Common Bantu</u>	<u>Gloss</u>	<u>Matengo</u>	<u>Source Language(s)</u>
*-códì/ *-yícódì	tear from the eye	[/lí-holi/]	Matumbi (P13)
*-daàdik-	invite	[/kú-halika/]	Swahili
*-dì	string / cord	[/û-si/]	Swahili, Cewa
*-dìbà	milk	[/má-siba/]	Swahili, Manda
*-dììk-	bury	[/kú-sika/]	Swahili
*-dìgò	load	[/ñ-sigu/]	Swahili, Manda, Yao
*-dím-	extinguish	[/kú-sima/]	Swahili, Yao, Nyanja
*-dìmù	spirit	[/ñ-sîmu/]	Swahili, Yao, Nyanja
*-dìngà	cannon/bee-hive	[/ñ-singa/]	Swahili
*-dìtò / *-dìtù	weight	[/u-sîtu/]	Swahili, Yao, Tumbuka
*-dùbà	flower	[/li-ûwa/]	Swahili
*-dùngù	God	[/M-ûngu/]	Swahili
*-gìma	whole	[/-sima/]	Swahili
*-kápì	paddle	[/u-kâpi/]	Swahili, Cewa
*-kéngid-	become clever/cunning	[/kú-senzela/]	Nyanja, Bemba (M42)
*-kìpà	vein/tendon	[/ñ-sîpa/]	Swahili, Ngoni, Manda
*-kóópì	slap	[/li-kôpi/]	Swahili
*-kùùt-	erase/rub.off	[/kú-puta/]	Swahili, Manda, Ngoni, Cewa
*-pìóm-	read	[/kú-soma/]	Swahili, Yao
*-pìù	knife	[/kî-su/]	Swahili
*-pòkù	blind person	[/ki-pôfu/ ki-pôpu/]	Swahili, Manda
*-puáan-	resemble each other	[/kú-pwanana/]	Swahili
*-púkò	bag	[/ñ-puku/]	Swahili
*-tìtù	forest	[/ñ-situ /]	Swahili, Manda, Ngoni
*-tóngé	cotton / cotton wool	[/lí-tonzi/]	Yao, Nyanja
*-tùnd-	teach/punish	[/kú-pundisa/]	Swahili, Manda, Ngoni
*-yàdìm-	borrow / lend	[/kú-hasima/]	Swahili, Yao
*-yàndì-	begin / start	[/kú-hanza/ kú-wanzâ/]	Swahili
*-yàndik-	write	[/kú-handika/]	Swahili

<u>Common Bantu</u>	<u>Gloss</u>	<u>Matengo</u>	<u>Source Language(s)</u>
*-yàní	kind of ape	[/li-jâni/]	Manda, Ngoni, Yao
*-yèng-	make oil	[/kú-hengula/]	Yao, Nyanja
*-yìkò / *-yìkò	ladle / spoon	[/ki-jîku/]	Swahili
*-yóg-	bathe	[/kú-houga/]	Swahili, Yao
*-yókà	snake	[/lí-joka/]	Manda, Ngoni, Yao
*-yòkì-	roast / burn	[/kú-josa/]	Yao
*-yòngidì-	add to	[/kú-hongesa/]	Manda, Ngoni
		[/kú-jongesa/]	Swahili, Nyanja
*-yúkì	bee	[/lú-jusi/ lú-nzusi/]	Yao, Nyanja
*-yúkì / *-yúkì	honey	/ b-ûsi /	Yao, Nyanja, Zulu, Xhosa
*-yùnì	bird	[/kí-juni/]	Manda, Ngoni, Yao, Tumbuka

Chapter Four

Identification of Putative Adoptives and Common Eastern Nyasa

4.0. Introduction

We attempted, in Chapter 3, to identify loan suspects in Matengo among the kind of data that is relatable to Common Bantu (CB). By contrast, in this chapter we will mainly employ material which is unrelatable to CB, but which occurs in at least two of the three languages: Matengo, Manda and Ngoni. We have labelled such material Eastern Nyasa (EN) and qualified the languages and speakers in question as 'EN languages' and 'EN speakers', respectively. The EN material in the data constitutes the basis upon which starred EN stems and radicals have been set up. Typical of such EN material and associable starred forms include:

<u>Gloss</u>	<u>*EN</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
deceive	*-kong-	kú-konga	kú-konga	kú-konga
vegetable	*-kolo	li-kólu	li-kôlo	li-kôlo
wisdom	*-cala	lu-hâla	lú-hala	lú-hala
cudgel	*-bonga	kí-bonga	kí-bonga	chí-bonga
feather	*-ngoma	li-ngôma	li-ngôma	li-ngôma
count	*-balang-	kú-balanga	ku-válanga	ku-válanga

There is also extensive material occurring both in EN languages and also in such other Eastern Bantu languages as Swahili and Yao but not sufficiently widespread to have been included in Comparative Bantu. This material has been qualified as 'Eastern Bantu' (EB). Typical EB material includes:

<u>Gloss</u>	<u>EB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Other EB Languages</u>
dwel/sit	*-tam-	kú-tama	kú-tama	kú-tama	Yao: ku-tama
snail	*-konokono	li-konókonu	-	-	Swahili: konokono
fruit	*-tunda	lí-tunda	li-tûnda	li-tûnda	Swahili: tunda
cross bridge	*-yombok-	kú-lomboka	ku-yómboka	ku-yómboka	Yao: ku-jomboka Nyanja: ku-omboka

In this case, we have equally set up starred EN forms, including apparently related items from other EB languages for comparison. These starred *EN forms have been compared with related EB forms according to the sound-correspondences established for CB, and informal notes made where discrepancies are apparent, or where phonological features are suggestive of loan-transmission.

There are also about a dozen cases where an EN form has been set up to account for regularities within the EN languages, even though the *EN form appears to be related, if indirectly, to a *CB form, e.g.

<u>Gloss</u>	<u>*EN</u>	<u>CB</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
bamboo	*-laci	*-dangi	ŋ-dâhi	n-dâsi	n-dâhi
kill	*-kom- 'hit'	*-kom-	kú-koma	kú-koma	kú-koma
hold	*-kamul-	*-kámud- 'catch'	kú-kamula	ku-kámula	ku-kámula
charcoal	*-kalakala	*-kádà	li-kálákala	lí-kalakala	li-kálakala
big	*-kulungu	*-kúdù	-koulôungu	-koulôungou	-

These forms presumably reflect a mutation (irregular development, symbolised by Guthrie with the symbol >>) between CB and EN. Where this mutation involves a change in meaning e.g. *-kom- 'kill', or a process such as reduplication, e.g. *-kalakala 'charcoal', there is not much that we can learn; where the mutation involves some irregularity of sound-correspondence, there is always the possibility that we are dealing with an indirect relationship involving adoption from one branch of Bantu languages to another.

In the following sections, we have studied the phonological system of EN, its starred inventory, regular and irregular reflexes of the starred forms in Matengo and putative adoptives in Matengo emerging from the EN data. We have concentrated mainly on EN material lacking widespread distribution, but drawing occasionally on EB and mutated forms.

4.1. Phonological System of EN

The phonological system of EN could be given as follows:

<u>Front</u>	<u>Central</u>	<u>Back</u>
p	t	k
b	d	g
f	l	
		c
		j
		y
m	n	ɲ
mb	nd	ng
ɨ		ɯ
i		u
	e	o
	a	

The phonological system of EN differs from that of CB, as given in Chapter 3, in that it contains both *d and *l in its starred inventory and in that it displays a different kind of treatment of fricatives and plosives before high (cedilla) vowels *ɨ and *ɯ.

The setting up of both *d and *l has been motivated by their contrastiveness in both Manda and Ngoni initially and post-vocally (d does not occur in Matengo in these environments). Reflexes of *EN *d and *l are illustrated below:

EN *d → d				
<u>Gloss</u>	<u>*EN</u>	<u>Manda</u>	<u>Ngoni</u>	
open	*-dindul-	ku-díndula	ku-díndula	
vomit	*-dek-	kú-deka	kú-deka	
chest	*-dali	ki-dáli	chi-dali	
make mistake	*-bud-	kú-buda	kú-buda	
break / cut	*-dumul-	ku-dúmula	ku-dúmula	

EN *l → l				
<u>Gloss</u>	<u>*EN</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
abdomen	*-leme	-	lí-leme	lí-leme
curse/abuse	*-lig-	kú-liga	kú-ligha	kú-liga
word/affair	*-lobi	lí-lobi	lí-lovi	lí-lovi
beat/hit	*-lapul-	kú-lapula	ku-lápula	ku-lápula
darken	*-pilal-	kú-pilila	ku-pílala	ku-pílala

With regard to the treatment of plosive before high vowels, most CB sequences of stop + cedilla vowel have resulted in fricative consonants in EN languages; all stops before *y* and bilabials before *i* have become *h* in Matengo and *f* in Manda and Ngoni (with a considerable number of words displaying free variation between *f* and *h* or skewed reflexes with *h*), and this series of correspondences has been symbolised **f* in EN. Alveolar and velar stops before *i* have merged with reflexes of **j* and are symbolised **j*. However, the sequence of plosive + close vowel re-emerges in EN (although extraneous from a CB point of view) and is widely exemplified, in all cases the vowel height being confirmed in Matengo and/or Manda:

<u>Gloss</u>	<u>*EN</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
come out	*-pit-	kú-pita	kú-pita	ku-pita
darken	*-pilal-	kú-pilila	ku-pílala	ku-pilala
chaff	*-timba	ma-timba	ma-timba	ma-timba
play	*-kin-	kú-kina	kú-kina	ku-kina
pain	*-bin-	kú-bina	kú-bina	ku-bina
abuse / curse	*-lig-	kú-liga	ku-ligha	ku-liga
become satiated	*-tupil-	kú-tupila	ku-tupila	ku-tupila
knife	*-pula	-	ki-pula	chi-pula
make mistake	*-bud-	-	ku-buda	ku-buda
bag	*-caku	ŋ-háku	li-haku	li-haku

The sound correspondences posited between *EN and the three EN languages (Matengo, Manda and Ngoni) are set out in Table 4.1., below:

Table 4.1. : Sound Correspondences within the EN Languages

*EN	Environment	Realisation			Examples				
		N13	N11	N12	*EN	N13	N11	N12	Gloss
*p		p	p	p	*-pit-	kú-pita	kú-pita	kú-pita	come out
*b	— V _{front}	b	v	v	*-lobi	lí-lobi	lí-lovi	lí-lovi	word/voice
	— V _{back}	b	w	w	*-bungí	ki-bôungi	ki-wûngi	chi-wûngi	forehead
	— a	b	v/w	v/w	*-balang-	kú-balanga	ku-wálanga	ku-wálanga	count
					*-dobana	-	ndowâna	ndowâna	fish-hook
*t		t	t	t	*-top-	kú-topa	kú-topa	ku-tópela	become heavy
*d		l	d	d	*-denge	lí-léngi	lí-denge	lí-denge	calabash bottle
*l		l	l	l	*-lakil-	kú-lákila	ku-lákila	ku-lákila	choke
*f		h	f	f	*-fuleji	húliá	fúlesi	fúlesi	white hair
*k		k	k	k	*-kotok-	kú-kotoka	ku-kótoka	ku-kótoka	cease
*g		g	g/gh	g	*-guimbi	u-gwéimbi	geimbei	ú-gimbi	beer
					*-lig-	kú-liga	kú-ligha	kú-liga	curse/abuse
*c		h	h	h	*-caku	ŋ-háku	lí-haku	lí-haku	bag
*j		s	s	s	*-piji	lí-péisi	lí-péisel	-	calabash
					*-daji	-	dási	kú-dasi	bush country
*y		j	y	y	*-yungan-	kú-joungana	ku-youngana	ku-yúngana	agree
*mb		mb	mb	mb	*-pamba	ŋ-pâmba	ŋ-pâmba	ŋ-pâmba	knife
*nd		nd	nd	nd	*-tindil-	kú-tindila	ku-tíndila	ku-tíndila	turn
*nj		nz	nj	nj	*-njigi	lí-nzéigi	lí-njeighei	lí-njigi	crab
*m		m	ŋ	m	*-ngoma	lí-ngôma	lí-ngôma	lí-ngôma	feather
*n		n	n	n	*-bin-	kú-bina	kú-vina	kú-vina	become painful
*ɲ (*ny)		ny	ny	ny	*-nyanja	nyânza	nyanja	nyanja	lake
*ŋ		ŋ	ŋ	ŋ	*-ŋaci	lí-ŋahi	lí-ŋani	lí-ŋahi	trouble
*t̪		l	l	l	*-t̪imba	ma-timba	ma-timba	ma-timba	chaff
*l		el	el	l	*-pind-	kú-peinda	kú-peinda	kú-pinda	take/carry away
*e		e	e	e	*-cengu	lí-hengu	lí-hengu	lí-hengu	work
*a		a	a	a	*-tam-	kú-tama	kú-tama	kú-tama	sit/stay/dwell
*o		o	o	o	*-lombi	ki-lômbi	lí-lômbi	lí-lômbi	maize
*u		ou	ou	u	*-tugul-	kú-tougoula	ku-touwoula	ku-túgula	carry
*y		u	u	u	*-pengu	lú-pengu	lú-pengu	lú-pengu	madness

4.2. Correspondences of Limited Occurrence

The statement of regular sound correspondences made in Table 4.1. above accounts for almost all the EN material in the data. There are, however, a few cases of recurrent correspondences realised in only a limited number of words so that their ascription to an EN origin is debatable. The sounds involved are: r, ch (i.e. /tʃ/), z, j and b.

4.2.1. r

Eight cases have been found in which r in Ngoni corresponds with l in Matengo or Manda, and one in which r in Manda corresponds with l/r in Ngoni. (r and l contrast phonemically in Manda and Ngoni, but only l occurs in Matengo):

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>cf. Matengo</u>
become aged	ku-gogóloka	ku-gogóroka	kú-gogaloka
baobab	ṁ-pêla	ṁ-pêra	-
give birth	ku-hógola	ku-hógora	-
cockroach	-	li-kúruru	li-kóulǒulu
come/go back	ku-kilíwuka	ku-ríwuka	kú-keilabuka
come/go down	ku-húluka	ku-húruka	kú-huluka
daub	ku-kílima	ku-kírima	kú-kilima
take out of fire	-	ku-hómora	kú-holamola
pepper	sóbora	sóbola/sóbora	-

No comparable words have been found from languages outside EN. In several instances, r appears to be part of a radical extension (morpheme of verbal derivation), but regular productive extensions in Ngoni employ /l/ not /r/. The data seem insufficiently consistent to justify positing an EN *r. On the other hand, a number of neighbouring languages including Tumbuka (N 21) regularly have r corresponding to EN *l, and their influence may well be suspected. Among alternative sources, r occurs regularly in Makua, Shona, Sotho; it occurs in Swahili and Zulu only in loan words.

4.2.2. ch

There is a number of cases in which ch (i.e. [tʃ]) in Manda and/or Ngoni corresponds with s in Matengo:

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
four	ŋ́-sesi		ŋ́-cheche
guinea fowl	lí-sundu	li-chûndu	li-chûndu
elder brother	ŋ́-hasa		ŋ́-hacha
sprinkle	kú-misa	kú-micha	kú-micha
			cf. Yao: ku-misa
scatter	kú-sesangana	-	ku-chechéngana
wash clothes	kú-sapa	kú-chapa	kú-chapa
			cf. Swahili: kusafisha
			Bemba: ukuchapa

With this we may compare Matengo: ma-kòsu, Ngoni: ma-kocho 'urine' from CB *-kòjó and Matengo: kú-hosa, Ngoni: kú-hocha 'poke in' from CB *-cooc-.

These examples seem too few and too much in conflict with more common treatments of *c to justify any EN starred forms. /ch/ occurs in the phoneme inventories of Manda and Ngoni, but is extraneous from the point of view of CB; it does not occur in Matengo. The sound also occurs in Swahili, Tumbuka, Makua and Zulu, in each case alongside s. It seems more likely that the forms in Matengo (and Yao) which have s are adoptives from languages which have ch and which have undergone assimilation. The only evidence that points in the other direction is the possible connection between Manda/Ngoni kú-chapa and Swahili kusafisha; however, in view of the Bemba ukuchapa, their resemblance is probably accidental.

4.2.3. z

z does not, as a rule, occur initially or post-vocally in EN languages (its normal environment being N). However, two cases in the data contain z in these unusual environments:

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Matengo</u>
friend	ŋ-kosi	m-kôzi	ŋ-kôsi
testicles	má-zende	má-zende	-

z is found in the phonology of a number of potential donor languages including Zulu and Swahili.

Given only two instances in which z is found within EN, there is no reasonable case for setting up an EN starred form *z to account for these developments. z here should perhaps best be considered as being the result of Swahili or Zulu influence on Ngoni and Manda.

4.2.4. j

Four items in the data contain the sound j in Ngoni and/or Manda:

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Matengo</u>
basket	li-jamânda	-	li-jamânda
bone	lí-jege	lí-jege	-
say / speak	kú-jova	kú-jova	-
thief	hêijei	m-hîji	-

j is extraneous in Manda and Ngoni, but occurs as a reflex of CB *y in Matengo (and also in Yao). Words with j adopted from Swahili normally retain j in both Manda and Ngoni. j also occurs in Zulu. The data is therefore compatible either with common origin in EN (but with insufficient data to justify augmenting the EN phoneme inventory) or with adoption from an unknown source.

4.2.5.

b

In a number of cases, /b/ occurs in Manda and Ngoni words, e.g.

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>cf. Matengo</u>
small/few	-debe	-debe	-
sieve	kú-heba	kú-heva	kú-heba
make mistake	kú-buda	kú-buda	-
cudgel	kí-bonga	chí-bonga	kí-bonga
refuse	kú-bela	kú-bela	-
harvest	kú-bena	kú-bena	-
smoke tobacco	kú-bema	kú-bema	-

b is extraneous in Manda and Ngoni, reflexes of *b becoming /v/ and /w/ according to context. However, patent adoptives from Swahili in these languages appear with b, e.g.

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Swahili</u>
badness	u-bâya	u-bâya	u-baya
cousin	binamu	binâmu	binamu
become blunt	-	ku-bútuka	kuwa butu
pumpkin	-	lí-boga	boga

The limited data restricted to EN that exhibit b is susceptible of interpretation as the result of loaning.

4.3. Further Features Affecting Correspondences Within EN

In addition to the phonological developments within EN implied in Table 4.1. above, certain processes or phonological constraints which we observed in Chapter 3 as affecting correspondences among data derivable from CB are relevant also to EN material, and are illustrated in this section.

4.3.1. Variability

Variability (cf. section 3.1.1. above) is perhaps to be seen in:

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
come	kú-hika	kú-hida / kú-hicha	-
sprinkle	kú-misa	kú-mija / kú-misa	kú-micha
charcoal	má-titiha	ma-sísila / ma-títila	-

where the variety within Manda is suggestive of 'Phonetic Play'. The meaning 'charcoal' perhaps lends itself to words imitative of flying sparks.

4.3.2. Dahl's Law

Two examples lend themselves to interpretation as an application of Dahl's Law (cf. 3.4.2, above), that is, a constraint that inhibits the occurrence of voiceless plosives in successive syllables:

<u>Gloss</u>	<u>Manda</u>	<u>Ngoni</u>	<u>cf. Matengo</u>
cover	ku-gúbika	ku-gúbika	kú-kupika
extract honey	ku-bákula	ku-bákula	(kú-pakula)
rub string/twine	kú-bota	kú-bota	kú-pota

4.3.3. Divergent Extension Vowels

The restriction on vowels occurring in extension position (cf. 3.4.1.) is evident in a number of forms particularly in Matengo:

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>cf. Swahili</u>
come back	kú-keilabuka	ku-kilíwuka	ku-kiríwuka	-
escort/ accompany	kú-hindakila	-	-	kusindikiza
become angry	kú-kasalika	-	-	kukasirika
become sad	kú-sikatika	-	-	kusikitika
get wet	kú-tepatela			
doze	kú-hihala/ kú-hihila	ku-sísira	ku-sísira	
go near	kú-hegalela	ku-hegélela	ku-hegálela	
scatter	kú-jitangana	ku-yitíngana	ku-yitíngana	
sway	kú-pepatuka	ku-pépetuka	-	
twinkle	kú-melámeta	-	ku-melámeta	

One example appears to constitute an exception in Matengo:

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>cf. Yao</u>
become black/ dark	kú-pilila	ku-pílala	ku-pílala	ku-pilila

The verbs here may be interpreted as denominatives from the adjective EN *-pili 'black / dark'.

4.3.4. Composite Vowels

Composite vowels are sometimes reduced to simple vowels, as observed in 3.4.3., above. Examples within EN include:

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
beer	u-(g)wêimbi	gêimbei	u-gîmbi
mush	ú-(g)wali	gwâli	ú-gali
spit	kú-huna	kú-hunya	kú-hunya
fur	-	lw-agi	lw-agi
gnaw	ku-nwena	ku-nwenya	ku-nwenya/ ku-nwenwenya

4.3.5. Eccentric Comparative Items

There are a number of sets of items lacking full systematic correspondence, which however appear superficially to be comparable.

<u>Gloss</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>	<u>Variation</u>
cover	kú-hyeika	kú-fweika	-	hy ~ fw
body	hyeiga	-	yiga	hy ~ y
wild cat	ki-sômi	li-hyômi	chi-hyomi	sa hy ~ hy
			cf. Yao: come	
fish-hook	lú-besa	-	lu-vecha	s ~ ch
eleusine	ú-rani	lêse	ú-lehi	h ~ s ~ h
			cf. Swahili: ulezi	
four	ñ-sasi	-	ñ-cheche	s ~ ch
eye lid	kí-koupaleila	ki-koupáleilei	-	a _s ~ ei _s
knock down	kú-kanga	-	kú-kana	ng ~ ŋ
left hand	mángěija	mángaiga	-	j ~ g
nasal mucus	lí-hundika	li-fwíndika	-	hu ~ fwi
saliva	ma-kolôgu	ma-kórofu	-	l ~ r & g ~ f
spirit	ki-bûta	-	chi-hûta	b ~ h
squeeze	kú-tonya	-	kú-tunya	o ~ u
shout	-	ku-swámila	kú-hwama	s ~ h
root	ñ-keiga	ñ-keigha / ñ-keiya	ñ-kaga	ei ~ i ~ a & g ~ gh ~ y
			cf. Yao: mciga	

A number of these cases involve variation in the treatment of fricatives, e.g. where we have already observed a measure of free variation (see 4.1., above), or h and s which represent alternative ('doubled') reflexes of *c in Matengo (see 3.2.1.7.). In the case of 'saliva' we have the non-realisation of a process which turns plosives into fricatives before close vowels (cedilla vowels).

In only three cases do we have comparative items outside EN, two where Yao or Swahili could be source of some but not all EN forms ('wild cat' and 'eleusine') and one in which the Yao form is more suggestive of being a loan from EN than vice versa ('root').

4.4. Skewed Reflexes of *EN in Matengo

There are a number of cases of skewed reflexes in Matengo which do not lend themselves to any systematic treatment:

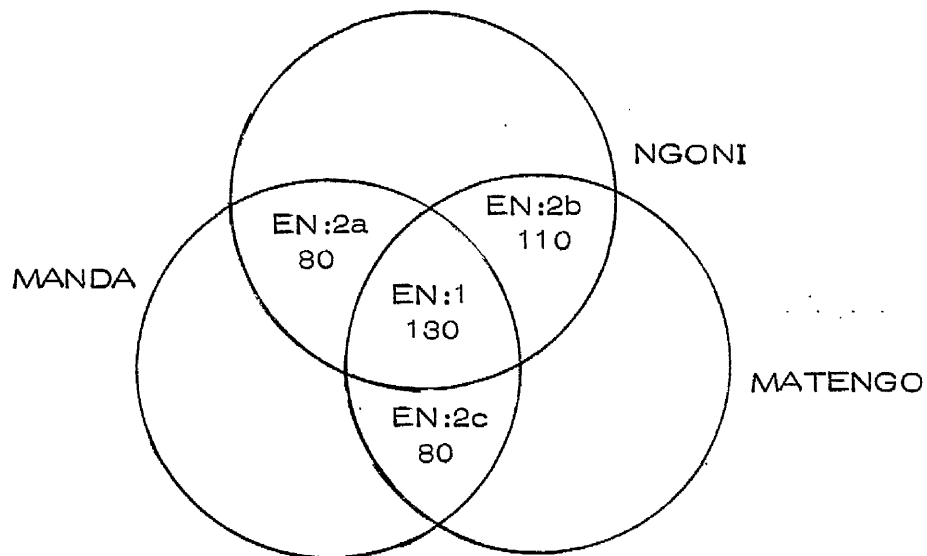
<u>Gloss</u>	<u>*EN</u>	<u>Matengo</u>	<u>Manda</u>	<u>Ngoni</u>
come out of water	*-cubuk-	ʔkú-hougoukaʔ (Mutation: b»g)	ku-hóúwouka	ku-húwuka
cross bridge	*-yombok-	ʔkú-lombokaʔ (Mutation: y»l)	ku-yómboka	ku-yómboka cf. Yao: ku-jomboka cf. Nyanja: ku-omboka
help	*-tangat(ɪl)-	ʔkú-jangatilaʔ (Mutation: t»j)	ku-tangátila	ku-tangátila cf. Cewa/Nyanja: ku-thangata
mosquito	*-jububu	ʔlu-hóúgǒbyʔ (Mutations: b»g, and j»h)	soúwouwou	súwuwu
be quick	*-yambatik-	ʔkú-joumbateikaʔ (Mutation: a»ou)	ku-yambátika	ku-yambátika
doze	*-jjil-	ʔkú-hihila/kú-hihalaʔ (Mutation: j»h)	ku-sísira	ku-sísira
comb	*-kuemul-	ʔkú-kwebulaʔ (Mutation: m»b)	ku-kwémula	ku-kwémula
nest/container	*-jaka	ʔkí-kasakasaʔ (Mutation: Metathesis)	ki-sakásaka	chi-sakásaka cf. Shona: chi-tsaka

The only mutations that occur more than once are b»g (in both cases in the environment /ou__ou/) and j»h. Since the latter involves on the surface an alternation h~s which is already familiar among the reflexes of CB *c, we may perhaps associate it with that uncertain development. In the absence of plausible sources of analogy or influence, no firm conclusions can be drawn from this data.

4.5. Summary

All together, some 400 EN forms have been set up, of which 130 are common to all three languages, and the remainder to only two.

They are distinguished in the Commentary of Appendix I as EN:1 (all three languages), EN:2a (Manda and Ngoni), EN:2b (Ngoni and Matengo) and EN:2c (Matengo and Manda):



For a fair number of EN starred forms, putative cognates have been found in Yao (70), Nyanja (24), Swahili (61) and Zulu (3) as well as Shona (9), Bemba (5) and Tonga (5). The last three languages are not immediate neighbours of EN and have been sampled through the accidental availability of sources of information, suggesting that the distribution of these putative cognate sets may be wider than we have direct evidence for. The regularity of correspondence within these sets suggests source-items originating prior to the divergence of the EN languages.

With regard to irregular correspondences that might point to adoption, there are a number of patterns in Manda and Ngoni that are too restricted for us to refer to EN with any confidence; of these, 8 cases with r could reflect Tumbuka, Makua, Sotho or Shona influence; 2 cases of z, 4 cases of j and some 10 cases of b could reflect many possible sources. 6 cases of ch in Manda and Ngoni are similarly extraneous; reflexes in Matengo with s reflect the normal pattern of assimilation of adoptives.

CHAPTER FIVE

COMMON BANTU TONAL REFLEXES IN MATENGO

5.0. Introduction

As with the rest of the phonological investigation (in Chapter 3) above), the tonal component has also been based on Common Bantu. The tonal reflexes of Common Bantu in Matengo have been identified; regular and irregular (skewed) tonal correspondences have been recorded; and tonally skewed items have been particularly closely studied in view of characterizing them as possible loans, on tonal grounds, whenever no alternative explanation for their skewed formation was available, and especially where convincing provenance could be established for them. Tonal skewing for an item is determined in accordance with whether or not the tonal reflex in question is linked with the tone pattern in N 13 which is the dominant one for items that constitute the reflexes of Common Bantu radicals of that tone class. It will, for example, be shown further on below that the majority of Matengo reflexes of starred radicals with *LL belong to Tone Class 1. The few that do not belong to this Tone Class need explaining. We will, consequently, assume in such a situation that, if tonal evidence is to be employed to identify loan suspects in N 13, these ought to be tracked down among the reflexes that do not behave (tonally) like the majority.

The majority of the nominal stems occurring in Common Bantu are disyllabic; 1,153 disyllabic starred forms occur in Guthrie's tonal inventory. These stems show the following tonal distribution:

*HL	498	i.e.	43%
*LL	321		28%
*LH	197		17%
*HH	137		12%

15% of these stems, that is some 169, have tonal reflexes in Matengo

and reflect the above distributional pattern:

reflexes of *HL (in N 13)	71	i.e.	42%
reflexes of *LL "	53		31%
reflexes of *LH "	29		17%
reflexes of *HH "	16		10%

The significance of these distributions is considered in section 5.4. where Common Bantu tonal reflexes in Matengo are correlated with various tonal patterns occurring in the language.

5.1. Matengo Tone Classes

The large scatter of tone patterns for the disyllabic nominals in N 13 has most conveniently been handled by sorting out the various nominals into Tone Classes (TC). Six such classes have been found sufficient to cater for all items in the data.

To determine classification, items were placed in several contexts. It was hoped that their characteristic behaviour would reveal the context where unambiguous tonal distinctions occur. Such a context, usually referred to as the 'Context of Maximum Differentiation', would constitute the defining factor for class membership. However, no strong or clearly significant single context of maximum differentiation for the data was available. Items were nonetheless characterized by their tonal behaviour in four environments:

- (a) Item in Isolation, or in Citation Form
- (b) Item before Possessive
- (c) Item before Demonstrative
- (d) Item after {nA} with / and (tone shown in brackets)

Accordingly, six different major Tone Classes (and two sub-classes) emerged:

	(a)	(b)	(c)	(d)
TC 1	h-ll	l-hh	l-hh	(h) l-ll
TC 2	fl	hh / lh	hh	(l) fl
TC 3	h-ll	h-ll	h-lh	(l) h-ll
TC 4	l-fl	l-hl	l-fl	(l) l-fl
(TC 4a	fl	hl	fl	(l) fl)
TC 5	h-rl	h-ll	h-ll	(l) h-rl
(TC 5a	rl / hl	hh / lh	hh	(l) rl / hl)
TC 6	l-hl / l-rl	l-hh	l-hh	(l) l-hl / l-rl

Examples:

	(a)	(b)	(c)	(d)
TC 1	lí-touli (mortar for pounding)	li-toúlí lyango (my mortar)	li-toúlí alei (this mortar)	ní li-touli (with/and a mortar)
TC 2	ŋombi (cow/cattle)	ŋombí jǎngo nombí jango (my cow)	ŋombí ajéi (this cow)	na nōmbi (with/and a cow)
TC 3	lú-jeimbu (song)	lú-jeimbu lwāngo (my song)	lú-jeimbú alóu (this song)	nu lú-jeimbu (with/and a song)
TC 4	li-tôki (banana)	li-tóki lyango (my banana)	li-tôki alei (this banana)	ni li-tôki (with/and a banana)
(TC 4a	nyumba (house)	nyumba jǎngo (my house)	nyumba ajéi (this house)	na nyumba) (with/and a house)
TC 5	kí-tōunga (basket)	kí-tounga sango (my basket)	kí-tounga aséi (this basket)	ni kí-tōunga (with/and a basket)
(TC 5a	pěti péti (ring)	pétí jǎngo petí jango (my ring)	pétí ajéi (this ring)	na pěti na péti) (with/and a ring)
TC 6	li-hína li-hĩna (name)	li-hína lyango (my name)	li-hína alei (this name)	ni li-hína ni li-hĩna (with/and a name)

The Table which follows summarizes this tonal classification. It should be noted that items with \emptyset -prefixes or with pre-nasalized prefixes have been incorporated into the data as well, e.g. those categorized under TC 2, TC 4a and TC 5a. It can be hypothesized that these nominals have tonal patterns that have been brought about by various processes of contraction.

A close link may therefore be assumed between items in TC 2, TC 4a, TC 5a and the 'fully-fledged' disyllabic nominals. Most of the nominals in the former belong to Noun Classes 9 and 10, where \emptyset - or pre-nasalized prefixes are a feature of their segmental morphological composition.

Table 5.1: MATENGO TONE CLASSES

Tone Class	Examples	Context			
		(a) Citation	(b) __ Poss	(c) __ Dem	(d) {nA}__
TC 1	lí-jabu (cassava) lí-himba (lion) lí-touli (mortar)	h-ll [<u>-</u>]	l-hh [<u>-</u>]	l-hh [<u>-</u>]	(h) l-ll [<u>-</u>]
TC 2	nyêmbu (songs) ŋômbi (cow/cattle) lyôuba (sun/day)	fl [<u>-</u>]	hh / lh [<u>-</u>] / [<u>-</u>]	hh [<u>-</u>]	(l) fl -[<u>-</u>]
TC 3	má-himba (lions) lú-jeimbu (song) kí-tanda (bed)	h-ll [<u>-</u>]	h-ll [<u>-</u>]	h-lh [<u>-</u>]	(l) h-ll -[<u>-</u>]
TC 4	li-tôki (banana) ki-nzâtu (basket) lu-pânza (bald head)	l-fl [<u>-</u>]	l-hl [<u>-</u>]	l-fl [<u>-</u>]	(l) l-fl -[<u>-</u>]
TC 4a	nyûmba (house) mbânza (bald heads) lw-âla (grinding stone)	fl [<u>-</u>]	hl [<u>-</u>]	fl [<u>-</u>]	(l) fl -[<u>-</u>]
TC 5	kí-tôunga (basket) má-hîna (names) má-nzéigi (crabs)	h-rl [<u>-</u>]	h-ll [<u>-</u>]	h-ll [<u>-</u>]	(l) h-rl -[<u>-</u>]
TC 5a	pěti (ring) sûpa (bottle) sěnga (grains)	hl / rl [<u>-</u>] / [<u>-</u>]	hh / lh [<u>-</u>] / [<u>-</u>]	hh [<u>-</u>]	(l) rl / hl -[<u>-</u>] / [<u>-</u>]
TC 6	li-hîna (name) li-nzéigi (crab) li-sûpa (bottle)	l-hl / l-rl [<u>-</u>] / [<u>-</u>]	l-hh [<u>-</u>]	l-hh [<u>-</u>]	(l) l-hl / (l) l-rl -[<u>-</u>] / [<u>-</u>]

5.1.1. Prefix, Stem and Tone Class

Before proceeding to examine each of these Tone Classes in detail, we ought to emphasize the significant role played by nominal prefixes in the process of defining Tone Class membership for certain nominal stems. It is usually assumed in studies of tone in Bantu linguistics that it is adequate to define tonal typology for a particular noun by merely identifying the tonal characteristics of the nominal stem, irrespective of the prefixes the stem may assume. In support of the overriding importance of the nominal stem, Guthrie asserts: "In a complete statement of the data ... both singular and plural items should be shown, where they exist, and the connector expressed as singular/plural alternation. Nevertheless, the plural member of a singular/plural pair of nominals normally differs in its prefix and a prefix alternation is not usually associated with any difference in the stem, consequently to give plural as well as singular would in most cases merely multiply items without providing any further information" (CpB I, 33.44, my italics). The majority of the nouns in the data for N13 clearly lend support to the validity of the hypothesis that prefix alternation does not effect any tonal distinctions in the stem :

lí-jabu	NC 5	'cassava root/plant'	Tone Class 1
má-jabu	NC 6	'cassava roots/plants'	Tone Class 1

Such nominals may be considered to be tonally univalent.

There, exists, however, a large stock of items in Matengo, mostly belonging to Noun Classes 5/6, 11/10 and 11/8, that are tonally ambivalent, in that a stem may be assigned to two distinct Tone Classes depending upon the nominal class prefix it assumes. Prefix alternation in this situation is significant since it apparently conditions tonal class membership for the stem. The following nominals may serve as an illustration:

{ lí-himba	NC 5	'lion'	Tone Class 1, l-hh / ___ Poss	}
{ má-himba	NC 6	'lions'	Tone Class 3, h-lí / ___ Poss	
{ lú-jeimbu	NC 11	'song'	Tone Class 3, h-lí / ___ Poss	}
{ nyéimbu	NC 10	'songs'	Tone Class 2, -hh or -lh / ___ Poss	

{ li-nzéigi	NC 5	'crab'	Tone Class 5, l-hl	in Citation form	}
{ má-nzéigi	NC 6	'crabs'	Tone Class 6, h-rl	in Citation form	
{ lú-ngopi	NC 11	'eye-lash'	Tone Class 3, h-ll / __	Poss	}
{ íngopi	NC 8(or 10)	'eye-lashes'	Tone Class 1, l-hh /	Poss	

The significance of 'tonal multivalence' in connection with linguistic borrowing will be shown in various parts of Section 5.4. (see, for example, towards the end of 5.4.3.4.).

5.1.2. Tone Class One (TC 1)

General Pattern:

<u>Isolation/Citation form</u>	<u>Possessive</u>	<u>Demonstrative</u> {nA}	
h-ll	l-hh	l-hh	(h) l-ll

The most outstanding feature of this Tone Class is a 'reversal' of tone patterns involving Nominal Prefixes and Stems, namely:

h-ll in citation form, in isolation or in sentence-final position
but l-hh before Possessives, Demonstratives, Adjectives and Numerals.

Note that 'reversal' here means only diametrically opposed tone pattern, with no implication of primacy of one pattern. This reversal which could be labelled "tonal polarity" , may be assumed to be conditioned here by whether or not the item in question precedes another item, irrespective of what precedes the former. A notable exception to this situation (which also constitutes another significant feature to this TC) is the situation where the morpheme {nA} 'and/with' precedes the nominal form. In such a context, the tones of both Prefix and nominal stem are low (i.e. the tone pattern l-ll obtains.) The following examples illustrate the patterns cited:

lí-jabu	cassava
lí-jábú lyángo	my cassava
lí-jábú aléi	this cassava
ní lí-jabu	with/and a cassava (root/plant)
ni lí-jábú líto	with/and our cassava

bilíbona	lí-jabu	they see cassava
bilíbona	li-jábú lyábo	they see their cassava
bilíbona	ní lí-jabu	they see cassava as well
bilíbona	ni li-jábú aleí	they also see this cassava

Nouns from 16 out of the 19 Noun Classes given in 1.2.7. above (q.v.) are represented in this Tone Class:

NC 1	m'-bena	elder brother
NC 2	á'-bena	elder brothers
NC 3	ŋ'-kota	maize cane
NC 4	mí'-kota	maize canes
NC 5	lí-jabu	cassava (root/plant)
NC 6	má'-jabu	cassava (roots/plants)
NC 7	kí-juni	bird
NC 8	í-juni	birds
NC 9	ínyama	(piece of) meat
NC 10	ínyama	pieces of meat
NC 11	lú'-heku	laughter
NC 12	ká'-juni	small bird
NC 13	tú'-juni	small birds
NC 14	ú-(g)wali	corn food
NC 15	kú'-goulu	leg/foot
NC 20	gú'-juni	big bird

No noun from the locative classes, 16 -18 , has been found to exhibit the tone patterns of TC 1.

5.1.3. Tone Class Two (TC 2)

General Pattern:

<u>Isolation/Citation form</u>	<u>Possessive</u>	<u>Demonstrative</u>	<u>{nA}</u>
fl	hh/lh	hh {mu-} {li-}	(h) fl

Tone Class 2, like Tone Classes 4a and 5a discussed further on below, includes the type of nominals which are characterized in this work as "two-place". All TC 2 nouns consist of two syllables, nouns whose composition has been effected principally through morphophonological processes inducing assimilation of adjacent sounds.

Three types of 'two-place' nouns will be distinguished in this work.

(i) -VCV stems with contracted CV-prefix

{li-}	+	{-ouba} → *lí-ouba →	ly-ôúbá	day, sun
{ba-}	+	{-ana} → *báana →	b-âna	children
{li-}	+	{-ihu} → *lí-ihu →	lí-hu	eye

(ii) -NCV stems with CV prefixes

		{-ndu} →	lí-ndu	
{mu-}	+	{-ndu} →	mû-ndu	person
{li-}	+	{-ndu} →	lí-ndu	animal
{si-}	+	{-ndu} →	sî-ndu	thing

(iii) Stems with asyllabic prefix (including zero)

{N}	+	{-ŋombi} →	ŋômbi	cattle
{N}	+	{-jeimbu} →	nyêĩmbu	songs
{N}	+	{-hingu} →	hĩngu	neck

The tonal characteristic of TC 2 in citation form or in isolation is falling tone on the first syllable followed by a word-final syllable bearing a low tone.

In the context after {nA} 'and/with' the TC 2 pattern given above remains unchanged. Before Possessives and Demonstratives, however, both segments of the nominal assume high tone. In addition, a low-high (lh) pattern is optionally employed before Possessives.

The question may arise as to whether or not TC 2 may be linked with any of the other TCs whose nominal members have a longer morphological composition, i.e. TCs 1,3,4,5 and 6. From the tone patterns summarized on pg. 205 above, it is obvious that those of TC 5 and TC 6 cannot be associated with TC 2. If TC 2 is in fact derivable (by reduction) from any of TC 1, 3, 4, 5 or 6, it would apparently not include the last two TCs. The possible suspects will therefore be TC 1, TC 3 and TC 4. Let us compare the tonal patterns of TC 1, 3, 4 with those of TC 2.

TC	C O N T E X T			
	Citation Form	Before Poss	Before Dem	After {nA}
TC 2	fl	hh / lh	hh	(l) fl
TC 3	h-ll	h-ll	h-lh	(l) h-ll
TC 4	l-fl	l-hl	l-fl	(l) h-fl
TC 1	h-ll	l-hh	l-hh	(h) l-ll

5.1.4. Tone Class Three (TC 3)

Unlike TC 1, though it also includes disyllabic nominal stems, TC 3 is characterized by a great deal of stability in its tone patterns. In all contexts, except only where a nominal is followed by a Demonstrative, the tone pattern is h-l (i.e. a high tone on the Nominal Prefix and low tones on both segments of the Stem). Before Demonstratives, nominals belonging to TC 3 have the tone pattern h-lh (i.e. a high tone on the Prefix, a low tone on the first syllable of the stem and a high tone on the second syllable). Schematically, these tonal variations may be shown as follows:

<u>Isolation/Citation form</u>	<u>Possessives</u>	<u>Demonstratives</u>	<u>{nA}</u>
h-l	h-l	h-lh	(l) h-l
Examples: kú-boku/má-boku	NC 17/6	TC 3/8	arm, hand
kú-boku kwāngu			my hand
nu kú-boku			with a hand
nu kú-boku kwāngu			with my hand
kú-bokú akoú			this hand
nu kú-boku ákoú			with this hand

Except for the Locative Noun Classes (NCs 16, 17 and 18) all the other Noun Classes in Matengo can be linked with this Tone Class.

The following sample represents typical TC 3 nouns of each NC:

NC 1	ń-habi	witch
NC 2	á-habi	witches
NC 3	ń-kongu	tree
NC 4	mí-kongu	trees
NC 5	lí-puku	big bag (Augmentative of NC 3)
NC 6	má-himba	lions
NC 7	kí-houbi	leopard, tiger
NC 8	í-houbi	leopards, tigers
NC 9	ínyama	piece of meat
NC 10	ínyama	pieces of meat

NC 11	lú-limi	tongue
NC 12	ká-pini	small handle
NC 13	tú-pini	small handles
NC 14	ú-habi	witchcraft
NC 15	kú-boku	arm, hand
NC 20	gú-puku	big bag

5.1.5. Tone Class Four (TC 4)

General Pattern:

<u>Isolation/Citation form</u>	<u>Possessive</u>	<u>Demonstrative</u>	<u>{nA}</u>
l-fl	l-hl	l-fl	l-fl

Nominals belonging to this Tone Class have a falling tone on the penultimate syllable and low tone in all the remaining syllables. The pattern is maintained in almost all contexts, except before Possessives, where the falling tone is replaced by high tone:

It must be noted that the TC 4 tone pattern l-fl shares close pitch similarity with the pitch patterns of Swahili (G42d). The Swahili contours are, of course, not to be interpreted in terms of tone, Swahili being a non-tonal Bantu language (see Chapter 2, section 2.5.1.3. below). Compare:

<u>Matengo</u> :	li-tóki	'banana'
<u>Swahili</u>	ma-tunda	'fruit'

Most foreign (i.e. non-Bantu) loans in Matengo, which are assimilated into the language via Swahili tend to assume TC 4 patterns (see 2.5.1.3.) The following are typical of such loans:

Matengo: bahâti 'luck' (< Swahili: bahati Persian) NC 9/10
 ki-bilîti 'match box' (< Swahili: kibiriti < Aramaic) NC7/8
 sahâni 'plate' (< Swahili: sahani < Arabic) NC 9/10
 li-setâni 'devil' (< Swahili: shetani < Hebrew) NC 1/2 or 6
 bi-lîka 'kettle' (< Swahili: birika < Arabic) NC 9/10
 li-lûka 'shop' (< Swahili: duka < Hindi) NC 5/6

5.1.5.1. Tone Class Four 'A' (TC 4a)

Tonally, the items belonging to this class display patterns identical with those of TC4 except for the tone on the prefix TC4a being a Tone Class that handles "two-place" nominals (as in the case of the items belonging to TC 2, see 5.1.3 above). Compare:

	<u>In Isolation</u>	<u>Before Poss</u>	<u>Before Demonstrative</u>	<u>After nA</u>
TC4	l-fl	l-hl	l-fl	l-fl
TC4a	fl	hl	fl	fl

Typical members of TCa include:

nyûmba	'house'
mbâza	'bald heads(sing:lu-panza TC 4)
lw-âla	'grinding stone'
s-ûmba	'room'

5.1.6. Tone Class Five (TC 5)

TC 5 nominals display a high tone on the prefix and a low tone on the final syllable of the noun. The penultimate syllable exhibits a falling tone when the nominal is in isolation or in citation form, and when it occurs after nA 'with/'and'. Before Possessives and Demonstratives, however, the penultimate syllable assumes a low tone:

<u>Isolation</u>	<u>Possessives</u>	<u>Demonstratives</u>	<u>nA</u>
h-rl	h-ll	h-ll	(l) h-rl

e.g.

kí-tóunga	'basket' (NC 7/8; TC 5/5)
kí-tounga sângo	'my basket'
kí-tounga aséi	'this basket'
ni kí-tóunga	'with a basket/by using a basket'

5.1.6.1. Tone Class Five 'A' (TC 5a)

TC 5a is characterized hl or rl (i.e. high-low and rising-low) tonal patterns in nominals in isolation or in citation form. This tonal behaviour also re-appears when the nominals in question are situated after nA 'with'/'and'. The nominals have hh/rl tone patterns in the content before Possessives and hh before Demonstratives.

Like TC 2 and TC 4a, TC 5a handles "two-place" nominals. TC 5a shows close tonal affinity to TC 5 and TC 6 (see next section). The close relationship referred to here is especially noticeable when we examine tonally ambivalent (or multivalent) nominal stems involving TC 5a. Stems of TC 5 or TC 6 normally take on TC 5a tone patterns when the TC 5 or TC 6 nominals are morphologically transformed into "two-place" nominals,

e.g.	lú-sěnga	'grain'	TC 5	sěnga	(grains)	TC 5a
	li-sǔpa	'bottle'	TC 6	hyǔpa	(bottles)	TC 5a

5.1.7. Tone Class Six (TC 6)

Matengo nominals belonging to TC 6 display l-hl or l-rl tonal patterns in isolation or in citation form. Before Possessives and Demonstratives, they assume the l-hh tonal pattern:

<u>Isolation/Citat.</u>	<u>Possessives</u>	<u>Demonstratives</u>	<u>nA</u>
l - hl/l-rl	l-hh	l-hh	(l)l-hl/rl

It is interesting to note that while the tone on the nominal prefixes of TC 5 nominals is always high, that of the TC 6 nominals is invariably low. And a comparison between the two TCs provides us with a tonal picture of the following type:

<u>TC 5</u>		<u>TC 6</u>
h-rl	vs.	l - rl
h-ll	vs.	l - hh

Another notable feature of Tone Class 6 is the significant number of tonally ambivalent nominal stems in N 13 which belong to TC 6 in the Singular but TC 5 in the Plural. The nominals involved in this connection belong exclusively to NC 5/6:

e.g.	li-hĩna	'name'	(TC 6)	má-hĩna	'names'	(TC 5)
	li-nzěigi	'crab'	(TC 6)	má-nzěigi	'crabs'	(TC 5)
	li-sůpa	'bottle'	(TC 6)	má-sůpa	'bottles'	(TC 5)
	li-băta	'duck'	(TC 6)	má-băta	'ducks'	(TC 5)
	li-hőumbi	'egg'	(TC 6)	má-hőumbi	'eggs'	(TC 5)
	li-boŭmba	'pit'	(TC 6)	má-boŭmba	'pits'	(TC 5)
	lihōtu	'hole'	(TC 6)	má-hōtu	'holes'	(TC 5)

And there appears to be no explanation for the fact that such ambivalence is limited to nouns of NC 5/6. The anomalous behaviour of NC 5/6 nominals has been of significant importance in this work (see section 5.1.9.).

5.1.8. Review of Tonally Ambivalent and Multivalent Stems

As has been indicated in 5.1.1. and 5.1.7 above, there exist in Matengo stems whose TC membership is associated with the class-prefix the stem assumes (tonal ambivalence/multivalence). It would appear that,

in this situation, NC membership is, at least to some extent, correlated with TC membership. This type of tonal variation is particularly associated with NC 5/6 nominals, whose nominal prefixes are li- and ma-; these nouns are dealt with separately in the next section (5.1.9.).

The summary of tonally ambivalent and multivalent nominal stems that we have come across in this study may be given as follows:

Ambivalent Stems

TC 1/3	e.g. lí-himba 'lion'	NC 5/6
TC 2/3	ly-ôuba 'sun/day'	NC 5/6
		NC 6: má-ly-ouba 'suns'
		má-s-ouba 'days'
TC 3/1	lú-ngopi 'eye-lash'	NC 11/10
		NC 10: í-ngopi 'eye-lashes'
TC 3/2	lu-jeimbu 'song'	NC 11/10
		NC 10: nyéimbu 'songs'
TC 6/5	li-hína 'name'	NC 5/6

Multivalent Stems

TC 5a/1/3	e.g. kóumi / lí-koumi 'ten, unit of ten'	
		NC 2,4,8,10,13/5,6
		NC 6: má-koumi
TC 5a/6/5	sŭpa / hyŭpa / li-sŭpa 'bottle'	
		NC 7/8 and 5/6
		NC 6: má-sŭpa

5.1.9. Tone and Nominal Class : The Case of NC 5

When TCs are correlated with NCs in Matengo (as shown in the previous sections, especially 5.1.1. and 5.1.8.), nouns of Gender Class 5/6 stand out as displaying a rather peculiar tonal behaviour : it accommodates most of the tonally ambivalent and multivalent nouns. Two tonal combinations, TC 1/3 and TC 6/5, are almost exclusively reserved for members of NC 5/6, TC 3 and TC 5 tone patterns being normally not associated with TC 5 nouns.

A sample of 140 disyllabic nominal stems belonging to this Gender Class (NC 5/6) has been studied in order to typify the tonal characteristics of this Gender Class. The full list of the nouns included is given in Appendix VI, q.v. These stems show the following distribution:

64 stems	TC 4/4	i.e. 45.71%
21 stems	TC 1/1	15 %
23 stems	TC 1/3	16.43%
20 stems	TC 6/5	14.29%
11 stems	TC 1/3 or TC 1/1	7.86%
1 stem	TC 1/3 or TC 6/5	0.71%
<hr/>		
140 stems		100.00%

Among the 64 stems of TC 4/4, 31 stems are items introduced into Matengo from foreign sources usually via Swahili (see Chapter 2). The remaining 33 stems are relatable to Bantu. Most foreign importations in Matengo tend to belong to this TC. This situation could perhaps be explained by referring to the pitch pattern of Swahili, which, like those of Luguru, Nyamwezi or Nyakyusa, is not to be interpreted as tonal. The penultimate stress in Swahili is similar to the penultimate falling tone in Matengo.

Apart from these 31 cases, the rest of the nouns in our sample are typically 'Bantu'. More than a half of the nouns in the sample show tonal ambivalence or multivalence. In both singular and

and plural forms, the stem is basically the same in shape. Tonal variation thus cannot be linked with the noun stems themselves, rather it is the singular/plural prefix alternation which seems to be responsible for the occurrence of tonal ambivalence and tonal multivalence. With regard to the Gender Class 5/6, tonal variation between singular and plural members of the same nominal stem (as in lí-himba 'lion' TC 1 but má-himba 'lions' TC 3) could be explained by the fact that NC 5 prefix has disappeared in a number of languages, including Swahili, Zigua, Ngazidja, Nsenga, Ihango, Kongo, Pende, etc.; in these languages NC 6 prefix has usually been retained. If we assume that NC 5 prefix was lost or was inexistent at some stage in Matengo, and was subsequently re-introduced into the language from neighbouring languages, the prefix (li-) could have been re-introduced with all sorts of tonal patterns found in the source languages. This concept of 'prefix loss and its subsequent re-introduction' may be useful in our attempt to explain some of the skewing and extraneousness detected in some of the items in our tonal data as discussed under 5.4.3.4. and also in Carter 1980.

5.1.10. Some Concluding Remarks

The reason behind all the foregoing discussion has been to establish a basis for determining the tonal relationship obtaining between CB and Matengo, especially the tone on the nouns that have been characterized in this work as 'two-place' and 'three-place'. The relationship has been detailed in 5.4. further on below.

We will, for a while, hold over discussion of tone in Matengo and consider the tonal behaviour of Manda and Ngoni nouns, as well as summarize the patterns of tonal relationships that have been found between the tonal typologies of CB nouns and those of both Manda and Ngoni. 5.2. looks at Tone in Manda and 5.3. at Tone in Ngoni. Both languages will be compared with Matengo, especially where tonal skewing in Matengo occurs.

5.2. Tone in Manda (N 11)

5.2.1. Manda Tone Classes

In contrast with Matengo (N 13), Manda (N 11) presents a less complex tonal picture. Disyllabic nominals exhibit two tone classes only; these have been labelled Tone Class A and Tone Class B patterns. "Two-place" nominals are all associated with one tonal behaviour called Tone Class 'C'. So far cognates of these have only been found in TC 'B'; none has been found in TC 'A'.

There is, besides, rather striking stability in the tonal behaviour of the Manda nominals studied, in almost all context. The only notable exception is the situation whereby items precede Classes 1 & 2 Third Person (Singular and Plural) Possessives.

The characteristic behaviour of each of these Tone Classes, in various environments, may be tabulated as follows:

Table 5.2: Tone Patterns of Manda Disyllabic Nominals

TC	Example		CONTEXT	
			In isolation/Citation Form, Before Possessive, Before Demonstrative, After 'and/with'	Before 3rd Person Demonstrative
TC A	Sing.	lí-tama cheek	h-ll	h-'hh
	Plur.	má-tama cheeks	h-ll	h-'hh
TC B	Sing.	lí-vagu axe/adze	l-fl	l-hh
	Plur.	má-vagu axes/adzes	l-fl	l-hh
TC C	Sing.	mbûnu nose	fl	hh
	Plur.	mbûnu noses	fl	hh

TC 'B' and TC 'C' are assumed here to be related, i.e. as being variants of the same TC. The assumption rests mainly on two pieces of evidence. First, TC 'C' in Manda appears to be similar in its surface tonal patterning to TC 'B', except of course for the tone on the prefix; obviously the morphological composition of the items in the two classes determines their tonal difference (see the Table in the preceeding page for comparison between the tone patterns of TC 'B' and those of TC 'C'). Secondly, it is remarkable that, if a stem is tonally ambivalent and the ambivalence involves either TC 'B' or TC 'C', the tonal range of tone classes involved will be limited to these two Tone Classes, i.e.

TC 'B' → TC 'C' and

TC 'C' → TC 'B' and the following examples indicate:

ndâsi	NC3/TC 'C'	bamboo	mi-lâsi	NC4/TC 'B'	bamboos
gôsi	NC3/TC 'C'	man	va-gôsi	NC2/TC 'B'	men
nyîna	NC1/TC 'C'	mother	va-nyîna	NC2/TC 'B'	mothers
ngôundi	NC10/TC 'C'	beans	lu-ngôundi	NC11/TC 'B'	bean
ṛ-dyângu	NC3/TC 'C'	door	mi-lyângu	NC4/TC 'B'	doors

Cognates in TC 'A' and TC 'C' are not recorded.

5.2.1.1. Tone Class 'A' (TC A)

As shown in the table above, all members of TC A are consistent in their tonal pattern. They exhibit a h-l pattern in all environments except when they precede a third person possessive form, compare:

má-tama	cheeks
má-tama gangu	my cheeks
má-tama gaku	your cheeks (2nd, sing.)
má-tama gitu	our cheeks
má-tama ginu	your cheeks (2nd, pl.)

but

má-támá gaki	his/her/its cheeks
má-támá gavi	their cheeks

Besides, unlike in Matengo, no difference of pattern is associated with difference of nominal class prefixes. There are, that is, no cases of tonally ambivalent or multivalent stems in Manda.

5.2.1.2. Tone Class B (TC B)

This class is characterized by -fl stem pattern in most environments, except before third person possessives, when it is -hh:

li-vâgu	axe/adze
li-vâgu langu	my axe/adze
li-vâgu laku	your axe/adze (2nd sing.)
li-vâgu litu	our axe/adze
li-vâgu linu	your axe/adze (2nd pl.)

but

li-vágú laki	his/her axe/adze
li-vágú lavi	their axe/adze

5.2.1.3. Tone Class C (TC C)

All 'two-place' nominals (cf. 5.1.3 above) in Manda belong to TC C which is characterized by fl tone pattern in all environments, except before possessive where the pattern is hh:

lí-bwa	dog
lí-bwa langu	my dog
lí-bwa laku	your dog (2nd, sing.)
lí-bwa litu	our dog
lí-bwa linu	your dog (2nd, pl.)

but

lí-bwá laki	his/her dog
lí-bwá lavi	their dog

5.2.2. Tonal Reflexes of CB;
Tone Typologies in Manda

5.2.2.1. Reflexes of *-LL

Sixty nominals in Manda can be linked with CB nominal stems tonally marked in Guthrie's data as *-LL. Thirty-two of them (i.e. 48%) belong to TC A. 15 (23%) belong to TC B and the remaining 19 items, (29%), belong to TC C. We should however not be too ready to infer that TC A, being associated with the majority of the reflexes in Manda of starred *-LL stems, is the regular reflex of *-LL: for there is evidence to show that both TC B and TC C constitute, fundamentally the same tone class (see 5.2.1.3) i.e. TC B and TC C in Manda should be regarded as variants of one TC. The amalgamation of these two TCs represents 52% of the *-LL reflexes, against 48% represented by TC A. The totals of both sets of TCs is too close to assign either of them any status of regularity with respect to CB *-LL reflexes (The data from which the reflexes of *-LL in Manda have been drawn is given in the Appendix IV.

5.2.2.2. Reflexes of *-HL

Starred forms marked *-HL in Guthrie's data have sixty-seven reflexes in Manda (see Appendix IV). Thirty-three of them (i.e. 49% of the total) exhibit the tonal patterns of TC A. These 33 items include one nominal stem whose tonal behaviour alternates between the patterns of TC A and those of TC B: *ká-poungou* TC A 'kind of eagle'
li-pôungou TC B 'kind of eagle'

Only six reflexes belong to TC B (i.e. excluding *li-pôungou*). These make up only 9% of the total. The remaining 42%, 28 reflexes, constitute here the members of TC C. Since TC B and TC C in Manda have been shown to be variants of a single Tone Class, the portion

between the two components displayed by the distribution of the reflexes of *LL (49% vs 52%) is almost 1:1.

No clear majority can therefore be assumed here; consequently, as in the case of the reflexes of *-LL, there is no obvious regular reflex of *-HL in Manda.

5.2.2.3. Reflexes of *-LH

There are 17 reflexes in Manda of CB *-LH nominal stems: Six belong to TC A, seven to TC B, and TC C has four members (see Appendix IV). TC B and TC C share between them eleven reflexes of the total: they outnumber TC A in the proportion of about 2:1. In view of the smallness of the total, it is unwise to be too dogmatic; but the regular reflex of *-LH in Manda will be taken to be TC B/TC C.

5.2.2.4. Reflexes of *-HH

Twenty-two items in Manda are reflexes of *-HH. Eleven of them belong to TC A, one to TC B and ten to TC C (see Appendix IV). If TC B and TC C are combined, the number of *-HH nominal reflexes relate to each other in the proportion of 1:1, TC A having eleven members and TC B + C having eleven members. Clearly, as with the preceding cases of *-LL and *-HL, *-HH does not seem to have a single regular reflex in Manda.

5.2.2.5. Summary

There are no clear regular reflexes.

The reflexes of CB tonal typologies in Manda can be displayed on a table as follows:

Common Bantu Tonal Reflexes in Manda

CB	TC A	TC B	TC C	TOTAL	TC B + TC C
*-HL	33	6	28	67	34
*-LL	32	15	19	66	34
*-LH	6	7	4	17	11
*-HH	11	1	10	22	11
TOTAL	82	29	61	172	90

5.3. Tone in Ngoni (N 12)

5.3.1. Ngoni Tone Classes

As in Manda, disyllabic nominals in Tanzanian Ngoni (N 12) display only three sets of tonal patterns. Three Tone Classes have consequently been distinguished here: TC I, TC II and TC III, roughly corresponding to TC A, TC B and TC C in Manda. (The use of Roman numbers for Ngoni TCs, Capital letters for Manda TCs and Arabic numbers together with small letter for Matengo TCs, has been made deliberately for ease of distinction in subsequent discussions in the work.) TCs I and TC II cater for the items with a syllabic nominal prefix, while TC III handles the two-place nominals in Ngoni.

Environments required to show full range of pattern are: Citation form, Before Possessive, Before Demonstrative and After {nA} "and/with".

Table 5.3: NGONI TONE CLASSES

TC	EXAMPLE		C O N T E X T				
			In Isolation/ Citation Form	Before Posse- ssive	Before 3rd Poss.	Before Demon- strative	After 'and/ with'
I	Sing.	mí-hílu 'taboo'	h-ll	h-ll	h-lh	h-ll	h-ll
	Plur.	mí-hílu 'taboos'	h-ll	h-ll	h-lh	h-ll	h-ll
II	Sing.	chi-hûli 'shadow'	l-fl	l-fl	l-hh	l-fl	l-fl
	Plur.	vi-hûli 'shadows'	l-fl	l-fl	l-hh	l-fl	l-fl
III	Sing.	lí-bwa 'dog'	fl	fl	hh	fl	fl
	Plur.	má-bwa 'dogs'	fl	fl	hh	fl	fl

5.3.1.1. Tone Class I (TC 1)

Nominals of TC 1 have a high tone on the prefix and a low tone on both syllables of the stem. However, when the third person possessives follows, the low tone in the final syllable is high:

ú-chwala	beer
ú-chwala wangu	my beer (2nd sing.)
ú-chwala gwaku	your beer
ú-chwala gwinu	your beer (2nd pl.)

but

ú-chwalá gwaki	his/her beer
ú-chwalá gwavi	their beer

Unlike in Manda, the penultimate syllable in Ngoni is tonally low in all contexts.

5.3.1.2. Tone Class II (TC II)

Nominals belonging to TC II in Ngoni assume the tone pattern l-fl in all environments, except before third person possessives, when the pattern is l-hh:

li-lîmba	xylophone
li-lîmba langu	my xylophone
li-lîmba laku	your xylophone (2nd sing.)
li-lîmba litu	our xylophone
li-lîmba linu	your xylophone (2nd pl.)

but

li-límbá laki	his/her xylophone
li-límbá lavi	their xylophone

5.3.1.3. Tone Class III (TC III)

Ngoni nominals with 'two-place' composition belong to TC III

(for definition of 'two-place' nominals, see 5.1.3. above). This tone class is characterized by the pattern fl in all environments except before Third Person Possessives, when the pattern is hh:

mâ-bwa	dogs
mâ-bwa gangu	my dogs
mâ-bwa gaku	your dogs (2nd, sing.)
mâ-bwa gitu	our dogs
mâ-bwa ginu	your dogs (2nd, pl.)
<u>but</u>	
má-bwá gaki	his/her dogs
má-bwá gavi	their dogs

5.3.2. Tonal Reflexes of CB; Tonal Typologies in Ngoni

The total number of tonal reflexes in the Ngoni data is 161, see Appendix 5.2.

5.3.2.1. Reflexes of *HL

CB nominal stems with *HL tone have in Ngoni 66 reflexes. This constitutes 41% of the total.

26 of them belong to TC I, 11 to TC II, 27 to TC III and 2 are ambivalent, belonging to TC II/III and I/III.

5.3.2.2. Reflexes of *LL

CB nominal stems with *LL tone have 56 reflexes in Ngoni, i.e. 35% of the total.

20 of them belong to TC I, 20 to TC II, 15 to TC III and 1 is tonally ambivalent, belonging to TC I/III.

5.3.2.3. Reflexes of *LH

CB nominal stems with *LH tone have 17 reflexes in Ngoni. This figure constitutes 11% of the total number of CB tonal reflexes in Ngoni.

4 of these 17 belong to TC I, 10 to TC II and 3 belong to TC III.

5.3.2.4. Reflexes of *HH

CB nominals with *HH tone have 22 reflexes in Ngoni, which represents 13% of the total.

9 of these 22 items in Ngoni belong to TC I, 7 to TC II and 6 to TC III.

5.3.2.5. Regular vs. Skewed Reflexes

Except for *HL and *LH where the reflexes bearing TC I tone patterns (*HL), and TC II patterns (*LH) appear to predominate, there is no clear correspondence between OB tones and Ngoni Tone, as the figures given in the data are rather too low for us to make clear decisions between regularity and skewing. And unlike in Manda where TCB and TC C could be tied together, TC II and TC III in Ngoni cannot be similarly linked; it is true that TC III nominals exhibit tonal patterns identical to those of the stems of TC II, but there is no clear pattern of ambivalence as in Manda. Of the three ambivalent stems, two are in TC's I & III, and one in TC's II & III.

NC 11

lú-vahu TC I →
lú-njuchi TC I →

NC 6

ma-pôfu TC II →

NC 10

mbâhu TC III 'side of body'
njûchi TC III 'bee'

NC 5

pôfu TC III 'foam'

5.3.2.6. Summary

The breakdown of each of these four categories into the 3 TCs in Ngoni may be summarized as follows:

	TC I	TC II	TC III	AMBIVALENT STEMS	TOTAL
HL (41% of Total)	26	11	27	2 (I / III) (II / III)	66
LL (35%)	20	20	15	1 (I / III)	56
LH (11%)	4	10	3	-	17
HH (13%)	9	7	6	-	22
TOTAL	59	48	51	3	161

5.4. The Identification of Putative Adoptives on Tonal grounds

5.4.0. Introduction

The discussion in all the foregoing sections of this Chapter has been intended to lay down some basis for the identification of putative loan material in Matengo, from intra-Bantu sources, using tonal criteria. We will now turn to the consideration of the identification methodology itself. In the following section, we will summarize the identification procedure and, in the subsequent sections, attempt to try out the methodology on Matengo (N13) data in order to find out if any N13 material can be suspected as being loaned from N11, N12 or Swahili, or simply as being an adoptive of unrecognised provenance.

5.4.1. Methodology

Assuming that tonal irregularity (or tonal skewing) is as useful a device for identifying adoptives as is the type of phonological skewing discussed in the preceding two chapters, we can look at tonally skewed items in the data to provide us with candidates of borrowing. The procedure followed here in identifying potential loans involves three stages, in the order given below:

- (a) Identifying tonally irregular reflexes in Matengo
- (b) Comparing these irregular items with corresponding items in possible loaning languages, and noting similar (surface) tonal contours

- (c) If tonally irregular items in N 13 are comparable with tonally regular items other languages (i.e. the possible source languages for borrowing in N 13), then loaning from these sources can be postulated.

Stems that successfully emerge from the combined effect of stages (a) - (c) of this Identification Process qualify as strong candidates for borrowing in Matengo. Items that result from the application of Stages (a) & (b) only are assumed here to constitute cases of weak potential adoptives; for although an indication of provenance for such adoptives is suggested, the difference obtaining between the actual shapes of the items in N 13 and those of items in the source languages still requires explanation, e.g. in terms of such processes as dissimilation, assimilation, etc. And, in some cases, the direction of loaning is not clearly indicated, or easy to determine.

Matengo reflexes that satisfy the condition of the first stage only are considered here as being of a rather insignificant borrowed status. With such items, either their provenance consists of languages beyond the scope covered by this work, or perhaps their anomalous tonal shape requires an explanation that lies outside the concept of linguistic borrowing. It is emphasized in this study that whatever is to be suspected of loaning can be confirmed only by bringing forth proof or at least an indication of its provenance.

5.4.2. Reflexes of CB *-HL in Matengo

As indicated at the beginning of this Chapter, the majority of Matengo nominals which are reflexes of Common Bantu stems are in fact reflexes of CB *-HL. They constitute 42% of the total number in the data (i.e. 71 out of 169). The Matengo reflexes distribute themselves into 13 groups, with regards to the 6 tone Classes in N 13:

8 items have the TC pattern 1/1

16 items TC 2/2

17 " TC 3/3

8 " TC 1/3

12 " TC 4/4

1 item TC 4/4a

3 items TC 5/5

1 item TC 5/5a

2 items TC 3/2

1 item TC 2/3

1 " that may be linked either with 6/5 or TC 5a/5a and, finally,

1 item which assumes TC 6 or 6/6 accordingly to usage.

The tonal distribution of Matengo stems with *HL reflexes has been tabulated in Appendix III, q.v.. In the table, NC indicates the Nominal Class of a stem. The inclusion of NCs in such tables has been found useful, especially where tonally ambivalent and multivalent forms are involved. The small cross (x) serves to plot the tonal distribution of an item, with regard to the 6 TCs in Matengo.

5.4.2.1. Regular Reflexes

According to the analysis, TC 3, whose nominal stems are numerically predominant, i.e. 17 out of 71, i.e. 24% of the total, may be assumed to be the regular reflexes of *-HL when the nominal has 'three place'. In the case of 'two-place' nominals the regular reflex is TC 2.

The status of TC 4 and TC 1 with regard to their regularity of correspondence with CB *-HL is less clear than that of TC 3 or TC 2. There is, however, a sharp contrast between the number of stems with TC 1 and TC 4, on one hand, and, on the other, that of the stems with the remaining Tone Class patterns. The former are represented by 8 nominal stems for TC 1 and 12 for TC 4; while the latter are each represented by not more than 3 stems.

5.4.2.1.1. Ambivalence among Stems with Regular Tonal Reflexes

In a number of cases, stems in N 13 which have been regarded as tonally regular reflexes of *-HL stems in CB are characterized as tonally ambivalent. Some of the tone combinations in question (TC 2/3, 3/2 & 4/4a) occur in stems whose morphological composition involves both a 'two-place' variant of the nominal and a 'three-place' form. The 'two-place' nominal is usually associated with a difference of Nominal Class (NC) membership of a particular nominal stem.

(a) Two of the regular Reflexes involve stems of NC 11/10 or 9/10. The tone patterns for these stems are those of TC 3 for NC 11 and TC 2 for NC 10.

*-kúndè bean → lúkounde NC 11 TC 3, ngóunde NC 10 TC 2
 *-jímbo song → lújeimbo NC 11 TC 3, nyéimbo NC 10 TC 2

(b) One other stem belonging to NC 11/10 shows a completely different TC combination: TC 4/4a

*-pánjà baldness → lupanza NC 11 TC 4, mbanza NC 10 TC 4a

Since, as has been shown earlier on, most two-place variants to TC 4 regularly assume the tonal patterns of TC 4a rather than those of TC 2 or TC 5a, we feel justified in regarding the combination as constituting a regular reflex. For TC 4a does not differ from TC4 except in the absence of the L prefix and TC 4 has been proposed as a regular reflex of *-HL.

(c) Finally, one more case involving two-place nominals has tonal patterns which constitute a complete reversal of those in (a) above. The stems involved are those of NC 5/6 and the tonal patterns are TC 2 for the two-place NC 5 nominal variant and TC 3 for the non-contracted NC 6 form.

*-yúba sun/day → lyôuba NC 5 TC 2 māsouba(days) NC 6
 mályouba(suns) TC 3

(d) Eight stems, seven of NC 5/6 and one of NC 3/4, exhibit a special type of TC correlation: TC 1/3, that is TC 1 when the stems assume NC 5 or NC 7 prefixes and TC 3 when they are used with NC 6 or NC 4 prefixes. In contrast to the four items noted in (a) - (c) above, the variation in tone patterns from these of TC 1 to those of TC 3 for those 8 stems is obviously not correlated with a difference of length. Both TC 1 and 3 are associated with 'three-place' forms; and both of these TCs have been shown to be regular reflexes of *-HL. Here are the eight items:

*-cím̀bà	lion	lí-himba	TC 1/3
*-jó̀kà	snake	lí-joka	"
*-kó̀bà	leather bag	ń-joba	"
*-kú̀mì	(unit of ten)	lí-koumi	"
*-pí̀dì	puff adder	lí-peili	"
*-pí̀gà	cooking stone	lí-higa	"
*-tá̀kò	buttock	lí-tako	"
*-té̀tè	reed	lí-tete	"

5.4.2.2. Skewed Reflexes involving *-HL

None of the six items in the table of irregular reflexes involving *-HL is a strong candidate for borrowing: the tonal pattern in these Matengo items differ radically from the ones in Manda and Ngoni; nor do they correspond with the pitch pattern of Swahili.

Table 5.4, which follows, compares these six forms with the reflexes of CB in N 11, 12 and G42d.

CB	English Gloss	N 13	N11	N12	Swahili
*-gǝ̀nà	name	lǝ́-hǝ̀na TC 6/5	li-hǝ̀na TC B	li-hina TC II	jina
*-pàcà	twins	má-pǎha TC 5	má-pasa TC A má-paha TC A	má-pasa TC I TC I	pacha
*-kódò	kinship	lú-kǝ̀lu TC5	lú-kolo TC A	lú-kolo TC I	ukoo
*-pǝ̀dà	pus	ú-hǝ̀la TC 5	má-fila TC A	má-hila TC I má-fira TC I	-
*-cúpà	bottle	sǝ̀pa TC 5a/5a lǝ́-sǝ̀pa TC 6/5	-	-	chupa
*-tóngà	stick	lú-ndǝ̀nga TC 5/5a	ndǝ̀nga TC C	ndǝ̀nga TC III	-

Table 5.4 : Summary of Irregular Reflexes of *-HL in Matengo vis-à-vis the reflexes of Manda, Ngoni and Swahili

5.4.3. Reflexes of CB *-LL in N 13

5.4.3.1. Regular and Irregular Reflexes

Fifty-three Common Bantu stems tonally marked as *-LL in Guthrie's data have reflexes in Matengo (N 13). Thirty-six of these reflexes (i.e. 68%) display TC 1/1 patterns. Six stems, all of them cases of asyllabic prefix, are characterized by the tone patterns of TC 2/2; six others by those of TC 4/4 . The remaining five stems belong to the following tone classes:

2 stems of NC 5/6 belong to TC 1/3

1 stem of NC 11/10 belong to TC 3/1

1 stem of NC 7/8 belongs to TC 3/3, and

1 stem of TC 11/10 belongs to TC 5/5a.

See the data on which this distribution is based in Appendix 5.1.

5.4.3.2. Regular Reflexes

We shall assume here that TC 1/1 is the regular reflex of OB *-LL in Matengo. The assumption is made on the grounds of the numerical predominance of the items in the Matengo data bearing this TC patterns and exhibiting regular segmental correspondence to the starred forms with *-LL tone. And, as a consequence of this assumption, we shall regard all the items in the data belonging to TC 1/1, and relatable to *-LL starred stems, as tonally regular reflexes of Common Bantu in Matengo. See Appendix III.

5.4.3.3. Skewed Reflexes

Two-place Nominals of TC 2/2

The status of the six 'two-place' nominals exhibiting TC 2 tonal contours both in Singular and in the Plural is not obvious. The items involved are: 2 nominals with contracted prefix and 4 with syllabic nasal prefix:

C.S. 2144	*- yòyò	→ mw-ôyo (in N 13)	'heart'
C.S. 2108	*-yògà	→ bw-ôga	'mushroom'
C.S. (2134+)	*-yòngò/nyòngò	→ nyôngo	'bile'
C.S. 1402	*-ngòmbe	→ ngômbe	'cattle'
C.S. 2171	*-yùndò	→ nyûndo	'hammer'
C.S. 1920	*-yâmbo	→ nyâmbo	'bait'

The tonal characteristics of these nominals could perhaps be linked with those of the CV-CVCV or C-CVCV shapes. It has not been possible to

show for certain that TC 2 nominals are contracted variants for TC 1 or of the other Tone Classes associated with longer non-contracted nominals, but the apparent complementarity of distribution strongly suggests this. If one accepts this hypothesis, the six nominals above serve to augment the size of regular reflexes of CB *-LL stems, and it is unnecessary to postulate adoption here.

5.4.3.4. Status of Skewed Items as Candidates for Borrowing

The clearly irregular reflexes now appear to be eleven. Six of these assume the tonal behaviour of TC 4/4 nominals:

CB	English Gloss	N13 TC 4/4	N11	N12	Swahili
1.* -cìpà	vein	n-sîpa / ŋ-hîpa 	ṇ-sipa TC A	ṃ-shipa TC I	ṃ-shipa
2.* -càngà	sand	n-sânga (cf. n-hanga TC 1)	ṇ-sânga/ ṃ-hânga TC B	-	ṃ-changa
3.* -pòkù	blind person	ki-pôfu	ki-pôfu TC B	chi-pôfu TC II	ki-pofu
4.* -dìbà	well/pool	ki-lîba	lí-liva TC A	chí-liva TC I	-
5.* -pùkù	mole/kind of rat	ki-hûku	-	-	fuku
6.* -jìdà	path/way	in-dêila	ndêila TC C	njîla TC III ṃ-zila TC I	njia

1. *-cìpà 'vein' → ŋ-sîpa/ŋhîpa (TC 4)

No change of meaning is attached to the distinction between the two Matengo forms. Also, the regular reflex of *-c is *-h (see Chapter 3), and all Swahili sibilants (s, ʃ, z, tʃ, etc.) are phonetically assimilated as s in N 13. We may, therefore, safely assume that the form ŋ-sîpa, which is both tonally and segmentally skewed, has been adopted from Swahili, rather than from Manda or Ngoni, whose tone patterns, for these items (ŋ'-sipa and ŋ'-shipa respectively) show less similarity to those of Matengo. The provenance of ŋ-hîpa cannot be clearly determined, in spite of its being segmentally a regular reflex.

2. *-càngà 'sand' → ŋ-sânga/ŋ'-hanga (TC 4 & TC 1)

Another case of doublets in N 13, as CB reflexes, is that of the starred form *-càngà 'sand'. However, the members of the pair do not share identical meanings, although both nominals lie within the same semantic field:

<u>ŋ-sânga</u>	'sand'	TC 4/4
<u>ŋ'-hanga</u>	'sandy beach, sea side'	TC 1

the latter being usually attested in the locative form

kú-ŋ-hanga 'on the beach, at the sea side'.

The former, ŋ-sânga, has a tonal shape that can be linked with the pitch-contours of Swahili m-changa 'sand', the sibilant ch ([tʃ]) being usually phonetically assimilated as s in Matengo. This similarity of pitch-contours strongly suggests that the Matengo form is an adoptive from Swahili, even though we could as well suppose that the loaning might have occurred through the mediation of Manda (compare the similarity of the tonal patterns of the forms ŋ-sânga N 13 and ŋ-sânga N 11) or perhaps that both Manda and Matengo might have borrowed simultaneously from Swahili.

The second form ń-hanga (TC 1), which is tonally dissimilar to the Manda form ń-hanga (TC B), is both tonally and segmentally a regular reflex and usually occurs with the locative class 17 prefix: kú-ń-hanga meaning 'at/on the beach/shore/sea-side', but more specifically referring to the towns, villages and the areas on the eastern side of Lake Nyasa. The form is thus apparently indigenous but has undergone a semantic change.

3. *-pòkù 'blind person' → ki-pôfu

The reflex of *-pòkù in N 13 is tonally skewed and appears to be a putative loan from Swahili or Manda or Ngoni. The Matengo tonal Patterns for this item are (at least in citation form) similar to the tone contours of the corresponding forms in the three languages. The assumption that this form (i.e. ki-pôfu 'blind person' in N 13) is an adoptive in Matengo is also supported by the presence of a skewed segmental reflex of *k before the cedilla vowel *u in the language. It has been shown in Chapter 3 (see Section 3.2.1.7) that, before all cedilla vowels, plosives in CB, both at C₁ and C₂, have the regular reflex h in Matengo. The f in ki-pôfu is therefore clearly extraneous, and extraneousness is a firmer indication of adoption than any other type of skewing (Guthrie 1967-71, Vol. II: 107-111). It could furthermore be pointed out that in Chapter 2 above we showed that f in Swahili would usually be assimilated as p in Matengo. The nominal is thus an anomaly in N 13. By contrast, the reflexes of *-pòkù in Manda, Ngoni and Swahili are segmentally regular since in the three languages f is the reflex of *k when the latter precedes the cedilla *u. The nominals ki-pofu in N 11 and ki-pofu in G 42d are therefore both possible sources of the putative adoptive ki-pôfu of N 13 ; we could also plausibly argue that each of the three EN languages has borrowed the form from Swahili.

4. *-dìbà 'well/pool' → ki-lîbâ

The reflex of *-dìbà in N 13 has equivalents in Manda and Ngoni (lî-liva and chî-liva, respectively), but not in Swahili. In both Ngoni and Manda, these reflexes of CB belong to the class of items that have tonal reflexes of *-LL, i.e. TC A in Manda and TC I in Ngoni. It is, however, assumed throughout this work that languages usually borrow surface features rather than underlying systems or otherwise deeper relationships; we may consequently consider that the lack of similarity between ki-lîbâ in N 13 and lî-liva (N 11)/chi-liva (N 12) weakens the argument for the hypothesis that the form is an adoptive from either of these two EN languages.

5. *-pùkù 'mole/kind of rat' → ki-hûku

The only other reflex in the languages under examination is the Swahili form fuku; Manda and Ngoni do not seem to have reflexes of this starred radical. Most of the nouns referring to animals usually belong to Noun Classes 1a/2a in Swahili and do not assume any Class 1/2 nominal prefixes either in the Singular or in the Plural (see 1.2.9, above):

cf. ng'ombe	NC1a/2a	cow, cattle
mbuzi	-do-	goat
kondoo	-do-	sheep
nguruwe	-do-	pig
paka	-do-	cat

The Swahili pitch pattern is similar to the Matengo TC 4/4 tonal contours in citation form. There is then a case for positing that Matengo has borrowed ki-hûku from the Swahili form 'fuku', a 'two-place' nominal in that language and that the class 7/8 prefix was subsequently added; no other hypothesis fits the case.

6. *-jìdà 'path, way' → i-n-dêila (TC 4)

The reflex of this Comparative Series in Matengo is both segmentally and tonally skewed. *-j/*-nj correspond to j/nz in Matengo; similarly, *-g*-ng correspond to g/ng (see Chapter 3). The occurrence of -nd- in the N 13 form i-nd-êila is therefore anomalous as a reflex of either *-jìdà or of *-gìdà. This segmental irregularity is also shared by the Manda reflex ndêila. The Ngoni and Swahili forms display regular correspondences with CB: njila/m'-zila in Ngoni and njia in Swahili.

The most reasonable assumption is that Matengo form í-nd-eila has been adopted from Ngoni. The Ngoni form is closer tonally, and the Manda form segmentally and the evidence does not point clearly to any particular origin. On balance the segmental evidence seems to me to weigh more heavily than the tonal one; but even so, the direction of borrowing - Manda to Matengo or vice versa - cannot be established even tentatively.

Of the eleven tonally skewed reflexes, there now remain five. Two of these belong to TC 1/3: TC 1 being the "regular" reflex of *-LL.

	CB	GLOSS	N 13 TC1/3, NC5/6	N 11	N 12	G 42d
7.	*-bàgò	axe, adze	lí-bagu/li-bago	lí-vâgu TC A	lí-vagu TC I	-
8.	*-bègà	houlder	lí-bega	lí-vega TC A	lí-bega TC I	bega

These two forms involve Noun Classes 5/6, a Gender Class in N 13, which tonally, is notoriously unstable (see 5.1.1., esp. 5.1.9.).

Carter 1980 cites, among others, the form lí-bagu 'axe' and argues that the offending tonal behaviour exhibited by certain members of the 5/6 Gender Class involving TC 1/3 as well as TC 6/5 "showing a different (tonal) membership for different nominal class-prefixes" indicates that "it is patently impossible to regard both items in such a pair as regular direct reflexes when they exhibit different tone-class membership". Carter further observes that this type of irregularity is what might be classed extraneous. Extraneousness is, in Guthrie's conception, an even firmer indication of linguistic borrowing than the usual kinds of skewing implicit in the preceding analyses of putative adoptives. The explanation in support of linguistic adoption for the nominals involved here may be given in terms of the hypothesis of loss and subsequent re-introduction of the Class 5 nominal prefix li- in Matengo from Manda. It is the tonal behaviour of the reflexes of *-bàgò in the linguistic neighbourhood that provides the support for the claim made here. The instability of the Class 5 prefix has also been discussed in 5.1.9., above.

In the same way the reflex of *-bègà 'shoulder' in Matengo lí-bega can be regarded as a putative adoptive from Manda, but not from Ngoni or Swahili. Swahili bega 'shoulder' displays a dissimilar pitch pattern for this item, apart from the usual characteristic loss of the Class 5 prefix in the language; Ngoni has the Class 5 prefix in the form li-, but the tone pattern of the item in question (i.e. lí-bega 'shoulder' in N12) does not fit the description of the tonal shape of the Class 5/6 items in the assumed process of the re-introduction of li- in N13. In conclusion, both lí-bagu and lí-bega are assumed to be putative loans in Matengo, and most probably from Manda.

There now remain three skewed Matengó reflexes of CB with *-LL tone:

9. lú-lehu/ín-dehu 'beard' ← *-dèdù 'beard' C.S. 519
 10. kí-lehu/í-lehu 'chin' ← *-dèdù 'chin' C.S. 520
 11. lú-senga 'grain' ← *-cèngà 'grain' C.S. 324

Let us see how these reflexes compare with their counterparts in Swahili, since Manda and Ngoni have no reflexes of these starred forms.

CB	English Gloss	N13	Swahili
*-dèdù	beard	lú-lehu TC 3	u-devu NC 14
		ín-dehu TC 1	ndevu NC 10
*-dèdù	chin	kí-lehu TC 3	ki-devu NC 7
		í-lehu TC 3	videvu NC 8
*-cèngà	grain	lú-sěnga TC 5	-
		sěnga TC 5a	chenga NC 10

The Matengo reflexes here are only relatable to their Swahili counterparts; but their tonal patterns do not seem to fit the pitch countours of these Swahili reflexes. Therefore, although the Matengo words for beard, chin and grain are tonally skewed i.e. as reflexes of CB starred nominal stems in Matengo, their skewing cannot be proven as having resulted from the borrowing of these nominals either from Swahili (nor, obviously, from the other two EN languages, Manda and Ngoni).

5.4.3.5. Putative Adoptives on Tonal Evidence (*-LL)

As has been shown in the above discussion on the reflexes of *-LL in Matengo, at least seven of the fifty-three nominals could be reasonably assumed to be loan suspects in the language.

On the degree of strength of evidence shown below for each item, the seven loan suspects could be qualified as STRONG or WEAK as follows:

I. Very Strong Case of Loan:

1. ki-pôfu 'blind person' (TC4) (← *-pòkù)

Evidence: Skewing: It is skewed both tonally and segmentally.

Extraneousness:

It contains an extraneous segmental feature f

Sources: It is most likely of Swahili origin, although it could also have been adopted via Manda (or Ngoni).

II. Strong Cases of Loans

2. lí-bagu 'axe, adze' (TC 1/3) (← *-bàgò)

Evidence: Skewing: It is skewed tonally.

Segmentally it is regular.

Extraneousness: The form has an extraneous feature of tonal ambivalence.

Source: It is probably of Manda origin.

3. lí-bega 'shoulder' (TC 1/3) (← *-bègà)

Evidence: The form is skewed tonally. Segmentally it is regular.

Extraneousness: It manifests an extraneous feature in that it is tonally ambivalent.

Source: This item is probably of Swahili origin.

4. ñ-sîpa 'vein' (TC 4) (← *-cîpà)

Evidence: Skewing: It is both tonally and segmentally skewed.

Extraneousness: This form contains no extraneous elements.

Source: It is most likely of Swahili origin.

5. n-sânga 'sand' (TC 4) (← *-càngà)

Evidence: Skewing: The item is skewed both tonally and segmentally.

Extraneousness: It contains no extraneous features.

Source: Swahili appears to be the most likely source (possibly adopted from Swahili through Manda).

III. Weak Cases of Loaning

6. in-délla 'path' (TC 4) (← *-jìdà)

Evidence: Skewing: This form is skewed both tonally and segmentally.

Extraneousness: It contains no extraneous features.

Source: Manda could be, but very tentatively, supposed to be the source of this item (see discussion above).

7. ki-hùku 'mole' (TC 4) (← *-pùkù)

Evidence: This is skewed only tonally.

Extraneousness: It contains no extraneous feature.

Source: The item is possibly an adoptive from Swahili.

The following two forms are both tonally skewed, segmentally regular and contain no extraneous features. But since, like the cases of beard, chin and grain discussed towards the end of the preceding section, these three items cannot be associated with any possible provenance, we are unable to relate their skewing to the process of borrowing.

n-hîpa 'vein' (TC 4) (← *-cìpà):

this is a doublet of n-sipa

ki-lîba 'well, pool' (TC 4) (← *-dîbà)

5.4.4. Reflexes of CB *-LH in Matengo

5.4.4.1. Regular and Irregular Reflexes

29 disyllabic nominal stems in the data (28 independent and 1 dependent) constitute the reflexes of CB radicals bearing *-LH tone. A tabulated summary of their tonal distribution is given in Appendix III (q.v.)

70% of these Matengo stems (i.e. 20 of them) exhibit TC 4 tonal contours; this includes those that belong to TC 4a, which, throughout this Chapter, has been taken as a conditioned 'two-place' variant of TC 4. The predominating position of TC 4 among all the other possible reflexes of CB *-LH suggests that this is the regular tonal reflex. The remaining reflexes of *-HL comprise TC1/1, TC2/2, TC3/3, TC5/5 and TC6/5. Nine Matengo stems are associated with these tone patterns and constitute 30% of the total data.

<u>Stems</u>	<u>TC</u>
5	1/1
1	2/2
1	3/3
1	5/5
1	6/5 or
	5/5

From this distribution the status of TC 1 and TC 2 vis-à-vis their regularity in correspondence with CB *-LH is not very clearly defined.

Numerically, TC 1 is represented more than other TC's (though one must bear in mind that stems with TC 4 outnumber stems with TC 1 in the proportion of 1:6.)

However, it is significant to note that any of the remaining TCs is overshadowed by TC 1 in the proportion of 1:5.

TC 2 presents a unique problem of its own. This TC exhibits tone patterns of a 'two-place' nominal. Given that there is only one stem in the data with such morphological composition, it would perhaps be inadmissible to regard it as a well-defined irregular reflex of CB *-LH, on purely statistical grounds. It may be assumed that TC 2 could well form part of the inventory of regular reflexes of *-LH where two-place nominals in Matengo are involved.

The remaining three cases: TC 3, TC 5 and TC 6/5 are obviously irregular.

lú-tohu (NC 11/8)	TC 3	navel	(← *-tòdú)
kí-tǔnga (NC 7/8)	TC 5	basket	(← *-tùngá)
li-nyǎhi (NC 11/6)	TC 6/5	grass	(← *-nyatí)
lú-nyǎhi (NC 11/6)	TC5/5	"	(")

5.4.4.2. Adoptives on Tonal Evidence (*-LH)

In accordance with the methodology developed in this work for the identification of adoptives on tonal grounds, the suspects for loaning in this section can only be taken from the set of the three irregular (i.e. tonally skewed) reflexes given at the end of section 5.4.4.1. above. On the evidence of the tonal patterns of the 3 EN languages covered in this study, and Swahili, only two of these Matengo stems appear to have cognates in the language being considered.

CB	English Gloss	N13	N11	N12	Swahili
*-tòdú ₃	navel	lú-tohu TC 3 NC 11/8	-	-	ki-tofu NC 7/6
*-nyàtí ₃	grass	lí-nyāhi TC 6/5 lú-nyāhi TC 5/5	lí-nyasi TC A	lí-nyahi TC I	nyasi NC 5/6

The form for 'basket' in N13 (ki-tounga, TC5/5) will not be considered here, since it occurs as a reflex of *-tùngá in N 13 only. The reflex of *-tòdú (navel) occurs both in N 13 and in G42d; but the pitch pattern of the reflex in G42d does not fit the surface tone pattern of TC 3 in N 13. And, as it has been argued in Section 5.4.1. it is the surface tone patterns that are significant where borrowing is involved.

The word lu-tohu (navel) cannot on the evidence there is, be shown to be a loan from Manda, Ngoni or Swahili. It would require us to go beyond the language coverage delimited in this thesis in order to explore possible sources of this Matengo form.

However, the reflex of C.S. 1948a *-nyàtí (grass) may be shown to constitute a genuine suspect for borrowing in Matengo from either Manda or Ngoni, but not from Swahili. All the four forms in the four languages N 11, N 12, N 1 and G42d are valid entries for C.S. 1948a. The pitch pattern of Swahili (which is of course not to be interpreted as tonal in itself) does not fit either of the tonal pattern given in the table for the N 13 forms: linyāhi (TC 5/6) or lúnyāhi (TC 5/5. However, there is surface similarity between at least some of the tonal contours in Matengo and those in Manda and Ngoni. More importantly, both the Manda and Ngoni tonal reflexes of *-nyàtí are regular - TCA and TCI being generally the predominating tone patterns in Manda and Ngoni, respectively (see 5.2.2. and 5.3.2.).

It is therefore reasonable to suspect lu-tohu in Matengo of being a loan from either Manda or Ngoni. The evidence draws upon the facts (a) that it has a tonally skewed reflex vis-à-vis CB *-HL, and (b) that it has surface tonal similarity with parallel entries in the languages of its assumed provenance, and finally (c) the fact that comparable forms in both Manda and Ngoni are actually linked with regular tonal reflex of *-LH in these languages.

5.4.5. Reflexes of CB *-HH in N 13

16 disyllabic nominal stems constitute the Matengo reflexes of Common Bantu *-HH. The limited data is obviously a draw-back in setting apart regular from irregular reflexes of *-HH even more so, in that the distribution of the reflexes into the six Matengo Tone Classes described in Section 5.1. is inconclusive.

<u>Tone-Class (TC)</u>	<u>Number of Reflexes</u>	
4/4	2	} 3
4a/4a	1	
5/5	2	} 4
5a/5a	2	
1/1		3
1/3		3
6/5		1
3/1		1
3/3		1
Total		<u>16</u>

There are three cases of TC 4/4, and one case of 4a/4a. It has already been shown above that TC 4 and TC 4a can be regarded as basically the same, TC 4a merely a 'two-place' variants of TC 4.

We have, consequently, four cases of TC 4. Similarly, there are in the data four nominal stems belonging to TC 5 (i.e. 2 belonging to TC 5/5 and 2 to TC 5a/5a - the latter being a contracted variant of the former). TC 1/1 and TC 1/3 are each represented by 3 cases.

None of these four possibilities (TCs 1/1, 1/3, 4/4 and 5/5) can with certainty be taken as the sole regular reflex of *-HH, nor is it possible to give the status of regularity to all of them simultaneously. However, the remaining three tonal reflexes of *-HH, i.e. TCs 3/1, 3/3 and 6/5, each represented by only one item, are deemed to be irregular; (and no explanation seems to be readily available for their exceptional tonal characteristics) and we may therefore regard these three nominals here as good candidates for borrowing. As to their possible provenance, consider the following table:

CB	English Gloss	N13	N11	N12	Swahili
*-túmbí	egg	li-hóumbi TC 6/5	lí-humbi TC A	lí-humbi TC I	-
*-kópé	eye-lash	lú-ngopi TC 3/1	ḡopi TC C	ngôpi TC III	u-kope
*-dúdǵ	whistling	lú-louhi TC 3/3	-	-	m-luzi

(i) The word 'egg' in Matengo (N 13) is both segmentally and tonally skewed. Segmentally, the expected reflex of CB *-túmbí in N 13 is **li-humbi (where *y → u and *t → h/___*y). The Matengo form is tonally dissimilar to those given for N 11 and N 12. Besides, Ngoni

has two other forms that are even more commonly used for 'egg', namely lí-kaŋa (NC 5/6, TC I) and li-yâyi (NC 5/6, TC II), the latter being the reflex of CB *-yáyí (of which the Swahili form yai 'egg' is also a reflex)

(ii) The word for 'eye-lash' in N 13 does not fit the pitch pattern of any of the forms in the other languages on the Table above. lú-ngopi is segmentally a regular reflex of CB *-kópe, its form being apparently a resultant of a back-formation process, whereby CB *-kópe → **lú-kopi (NC 11/ín-gopi (NC 10) → lú-ngopi (NC 11). Its tonal skewing cannot, however, be linked with any particular origin.

(iii) The word for 'whistling' in N 13 is segmentally regular, since *d → l, *d → h/___*í and *u → ou or u. Tonally it is skewed and is dissimilar to the Swahili pitch pattern, the Swahili form being the only other reflex of *-dúdí on the Table.

Our comparison of these skewed forms in N 13 with their counterparts in N 11, N 12 and Swahili, whenever they occur, does not seem to be fruitful in determining the origin of the skewing. And since no provenance can be established for these tonally skewed items, our suspicion regarding their loan status cannot be confirmed.

5.5. Summary (of Findings) and Conclusion

In this Chapter, we have attempted to show how the supra-segmental feature of TONE in Bantu could be usefully employed to detect putative Matengo loans from intra-Bantu sources. Our main pointer to linguistic borrowing has been skewing and, especially extraneousness. We have also emphasized the importance of indicating a probable source of any loan suspect so as to strengthen its status as a putative adoptive.

To summarize our findings, here is a Table showing the number of items found in each of the Tone Classes (TC) combinations attested in the course of our study of the reflexes in N 13 of the four CB tonal

typologies. From such a Table can be seen both the grounds for establishing tonal reflexes, and the TC combination in which skewed reflexes predominate, and then consider whether or not the TC patterns in question are generally relatable to any of the other languages studied in this work.

SUMMARY OF THE TONAL REFLEXES OF CB TONAL TYPOLOGIES.

IN MATENGO (N 13)

<u>N13 TC Combination</u>	<u>*-HL</u>	<u>*-LL</u>	<u>*-LH</u>	<u>*-HH</u>	<u>TOTAL</u>
1/3	8	2	-	3	13
2/2	16	6	1	-	23
2/3	1	-	1	-	2
3/1	-	1	-	1	2
3/2	2	-	-	-	2
3/3	17	1	-	1	19
4a/4a	-	-	-	1	1
4/4a	1	-	-	-	1
4/4	12	6	20	2	40
5/5a	1	1	-	-	2
5a/5a	-	-	-	2	2
5/5	3	-	1	2	6
6/5	1 (or 5a/5a)-	-	1 (or 5/5)	1	3
6/6	1 (or 6)	-	-	-	1
1/1	8	36	5	3	52
TOTAL	<u>71</u>	<u>53</u>	<u>29</u>	<u>16</u>	<u>169</u>
% of Grand Total	42%	31%	17%	10%	100%

In the Summary, above, the brackets () indicate cases of 'Tonal Ambivalence' or 'Tonal Multivalence'

The Table shows that the combination with the highest number of skewed reflexes is TC 1/1 with 13 tonally skewed. TC 1/1 is followed by TC 1/3 with 10, TC 4/4 with 8 and TC 5/5 with 6. Each of the remaining TCs has 3 or less than 3 skewed members.

The first four TCs, with a relatively higher number of skewed items, contain 37 reflexes. 23 of them, i.e. those of TC 1/1 and TC 1/3 (constituting 62%) are relatable to the tonal patterns of Manda and Ngoni, TC A in Manda and TC I in Ngoni. 8 items, i.e. 22% of 37, are relatable to the pitch patterns of Swahili as well as TC B in Manda and TC II in Ngoni. Only 6 items (those of TC 5/5) do not fit the tone patterns of either Manda or Ngoni; nor can they be matched with the pitch patterns of Swahili.

In this particular situation, our identification methodology would only support the loan status of 31 out of 37 items, our main contention being that, although all the 37 forms quoted are cases of tonal skewing, an indication of the origin of their skewing can be given only for the first 31 items, and not for the remaining 6.

A P P E N D I X I :

The Data Appendix for Chapters Three and Four

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
abdomen	+tumbō / -tumbū EN +feme +da +nēnā	tū-tumbū mu-nda 18 tū-nēnā 11111	if-feme	if-feme	tumbo: Yao ci-tumbo, P23 lu-tumbo	CB +u EN 2a CB CB
abdomen below the navel		kū-toundouka / kū-toundoula / kū-toundou (kū-liga 'curse')	kū-liga	kū-liga		EN 1
abuse	EN +lig-	II-tōundu 5/614				CB Extension vowel EN 2c
abuse in	+tindik- EN +long-	kū-hindakila kū-longana	kū-longānā / kū-longānā		kusindikiza	CB CB
acidity, bitterness, fierceness	+kādī	ū-kālī 14/31	ū-kālī	ū-kālī u-ūūū u-chachu	ukālī P21 u-kālī, N31c u-kālī	CB
	[+bab- 'become bitter']					CB (deverbative)
'become' active, bitter, sour	EN +kagacj +bab-	ngāgahī kū-baba	ngāgahī		urhachu	<Sw IN12 s~ G42d EN 2c CB
- list of medicine on sore	+tēnd- +kit-	ku ny-wila kū-tēnda kū-kita	kū-kita	kū-kita	kutenda, Yao -tend- N31c -ert-	CB CB, N13+1-1 N11 +1-ej CB
act / do	+kangad-	kū-kangamala	ku-kangamala			
'become' active / strong				kū-ogasyika		
add to / store up	+dūnd- / -dūndik- +yongidj-	kū-lunda / kū-lundika kū-jongesa / [kū-hongesa]	ku-yongesa	ku-yongesa	kulunda kuongesa	CB +u-u CB The skewed variant in N13 attributable to Swahili influence
'puff' / adder	+pidi	II-pidi 5/611/31	ndougoudu	if-moma mbāju	piri, N31c m-phili Yao II-pili	CB +t CB
adze	+bāājū	Im-bāju 9/1011 hāliku 9/1011	mbāju	mbāju	ā'uma	<Sw ? CB
ā'faiir	+gāmbā +yāmbō	III-gambu 'court-case' 5/6111 mambu 61a1		tēsu	kigambo? jambo / mambo	CB CB Materigo apparently shares with Swahili unambiguous reflexes of the two occlusant starred forms +gambā and +yāmbō land of the related verbal +yambo is otherwise wholly Western in its distribution. It is unclear whether the situation in Materigo arises from Swahili influence.

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
	EN + -lobj	mā-lobi 6/1a1	li-lobi	li-lobi	cf Lingala 'lob-' 'speak', Yao 'lloŵe' 'word'	EN 1
age group	EH + -tanga	tānga	ŋ-tānga	ŋ-halu m-tānga	Zulu mtanga 'age-grade'	EN 1
become aged	EH + -gogolok-	kūba ŋ-iseja	ku-gogoloka	ku-gogoloka		Possibly connected with Swahili m-zee 'old man', ku-zeeke 'become old'
- lef things		kū-lala				EN 2a
- lef things		ku-kongoloka				
agree	+ylik-	kū-jeteikakella	ku-yeteikella		kutikia	CB +i?, N12 - Dahl's Law? N13 Ext V
	EH + -yungan-	kū-iyungana	ku-yūngana		kupatana	EN 1
		kū-patana			mepatano	<Sw
agreement		ma-patānu 6/1c	ma-yūnganu			<Sw
allow / let	+dek-	kū-leka	ku-leka		kuruhusu	CB
		kū-luhusu				<Sw (Arabic)
alter	+pindud-	kū-peindulla			kubadili	CB +i-ei
		kū-badilla			kugeza	<Sw (Arabic)
		kū-geusa				<Sw
become angry / sad	EN + -ganambuli-	ku-ganambulla	ku-ganambula			EN 1 Causative form in N12
	EN + -cjom-	ku-hyoma	ku-hyoma		kukasirika	EN 1
		kū-kasalika			kuskitika	<Sw N13 Ext V
		kū-sikalika			kununa	<Sw N13 Ext V
		kū-nuna				<Sw
animal	EH + -ndu	li-ndu 5/6/2				EN 2b
					Imduu 'insect'	<Sw (Arabic)
announce	+nyamā		li-nyama		inyama	CB
announcement		ku-tangasa	ku-tāngasa		tangaza	<Sw or EB
		li-tangāsu 5/6/1c	li-tāngāsu		tangazo	<Sw or LB ? The final -u in Manda is anomalous against Swahili -o. This may represent Matengo influence in Manda
art	+yirik-	kū-jeteika,	ku-hyēitika,			CB +i-ei Ext V N11/12 Dahl's Law
		ku-jeteikella	ku-hyēitella		kutika, kutikia	
kind of antelope	+babada	mbaballa 9/10/1				CB
	EN + -punju	mbūnzu 9/10/1a	mbūnju		Yao nibunju 'eland'	EN 2c
	EN + -palapi	mbalāpi 9/10/1c			Yao mopalapi 'sable'	EN 2b
art heap / hill	+gūdū	kū-hougūdū 7/8/3	ki-souwoulou		kichugui, Yao lisigulu, Nyanya cūlu	EB While these forms are obviously connected, there is no way of reconciling all the consonantal divergences
kind of ape	+yānj	li-jāni 5/6/1c	li-yani		nyani	CB
	EH-tumbuli	li-tūmbella			tumbuli Yao ciumbuli	EB The final syllable in N13 shows discrepancy of vowel with other languages, conceivably due to hyper-correction

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc	Notes
arm / hand	• bokó	kú-boku 15/5(3)	kí-woko	chi-woko	kwapa	CB
arm-put	• kuapa	íŋ-gwapa 3/10(1)	ngwápa	ngwápa	jeshi	CB
army		lí-jésh 5/6(1)	lí-jéshi	lí-jéshi		<Sw / Arabic
army- / driver-ent	• cádákú	[lu-háláhu / háláhu] 11/10(5/5a)	sárafu	sárafu / [halawu]	[sárafu] /áo sárafu	*-h. The forms in NI3 and NI2 [halawu] appear to have common skewed origin Sw [sárafu] - <csdákú
arrange	• pang-	ku-panga	ku-pánga		kupanga	CB
arr- / e	• plk-	ku-hika	ku-fika	[kú-hika]	kufika	CB NI2 (*p-[-])
ascend	• kuéd-	ku-kwela	ku-kwela	ku-kwela	kukwela	CB
ashes	• by	í-í-fu 5(1)	lí-fu		jivu NI1 lí-fu	CB
	EN+ -yenge		lí-éngé	lí-éngé		
ask		ku-lalukithal / kú-lalukithal				
	EN+ -kot-		kú-kota	kú-kota		EN 2a
ask for	EN+ -lub-	kú-louba	kú-louba			EN 1c
		kú-laja	kú-souka			
assemble		ku-kusanya / kú-kusanyika	ku-kusanyika	kú-yupa	kukusanyika	<Sw
	EN+ -boningana- (CB	kú-kusanyika	ku-kutánika		kukutánika	<Sw
	• -bon- 'see')	íkú-boningana 'meet'	ku-zoningana			EN < CB
• o'd	• -yep-	kú-yepa	kú-yepa		kuepa	CB
		kú-sepuka			kuepuka	CB
• •	• -baágó- / • -báájó	lí-bagu 5/6(1/3)	lí-vagu	lí-vágu	Yac lí-wago	CB NI1/12 V2
bab / sling	[• -páp 'carry baby on sling]	lí-pengullal 5/6(1/3)	mbápu			CB (fieverbative)
back	• -góngó	g-gongu 3/4(1)	góngu		m-gongo	CB NI1 V2
'at 'hnd back	• -yúniá / • -nyúniá	kú-nyuma 17+9			nyuma	CB
bad IADJI	ED+ -baya	-baya	-baya	-baya		EB
become / bad	• -bíp-	kú-beipa	kúveipa			CB + -er
	EN+ -caka- - ICB	kú-hakalla		ku-hákala	íkuchakaa 'become worn out'	EN 1 ICB
	• -caakad- 'become worn out')					
• -béd- go bad / rot		ku-bola	kú-wola	kú-wola	kuoza	CB
• -günd-		ku-hunda 'go stale			kuvunda	CB
		ku-nuna				
uag	EN+ -caky	g-haku 3/4(1)	lí-haku	lí-haku	Yao msaku	[H]
	• -pykó	[m-puku 3/4(3)]	m-fuku	m-fuku	m-fuku	CB in NI3 *-p-[-h] in NI1 *-o in final position
	• -tumba	g-tumba 3/4(3)			mtumba (Cewa	CB + -u
					-tumbu	

Gloss	CB / EN	N13	N11	N12	Swahili etc nkoba	Notes <Swahili>
coat	*-yambō	nyāmbu 9/10/21	nyāmbu	nyāmbu	[chambol]	CB N11/12 V2
cake or ashes	*-dymbik-	kū-humbika		kū-humbika		CB
- roast, and other kinds of dry cooking	*-yokj-	[kū-josa]		[kū-yocha]		CB *k-j-hy in N13, hy / sy in N12
balancess - bald head		lu-pānza / mbānza 11/10/14/141		kū-nyanya		
bale out water	*-padd *-kēp-	ku-kapa 'get mouthful of water'	ku-kapa	chi-pala	upaa	CB CB
bamboo	EN *-laci, of CB *-dāngj	ṇ-dāhi / mi-lāhi 3/14/1	ndāsi / mi-lāsi	ndāhi / mi-lāhi	[mwanzi]	EN *-CBI All EN forms are consistent with EN *-laci Guthrie regards *-ngj in second position -hi as regular, but there is no supporting evidence
banana	*-tōbke / *-tōbki	li-tōki 5/6/14	li-tōki	li-tōki		CB
bacoba	*-buyū EN *-pela	ṇ-būyu / [ḡ-kouyu]	ṇ-pēla	ṇ-pēra	m-buyu	CB *-u-u EN 2a
bar (door)	*-pīng-	kū-pēngelka kū-patika	ku-pēngelka	ku-pīngika		CB *-e-i
(door) bar		ki-bahu 7/8/13	li-pēngelū			
	EN *-panda	ki-panda 7/8/13		li-dindūlu chi-panda chi-zingiti	kizingiti	EN 2b <Swahili>
bar (of tree)		li-jōūa 5/6/16/51		ṇ-gūmba	ṇ-gūmba	CB VIV-Y occurs frequently in N13 as an optional rule yielding free variants. The cited form could be interpreted as a case of hyper-correction
carrier woman	*-gumbā	[ḡ-gulumba 1/2/11]	ṇ-gūmba			CB
case of tree-trunk	*-c[na] / *-t[na] / *-k[na]	li-hina 5/6/14	li-sina	chi-hina		
basket	*-tūngā EN *-njaru	ki-tōunga 7/8/5 ki-nzātu 7/8/14 li-jamānda 5/6/14		chi-njātu li-jamānda	Yao litunga, citunga Yao lijamanda, Nyanja jamanda	CB *-u-ou EN 2b N12 < N13 ?
bathe	*-yōg-	[kū-houga]	kū-lhyogha		Yao ku-jooga, ku-oga	IN13 *-yo-jol N13 <Swahili ? <CBI
	*-camb-	lkū-samba 'wash'		kū-samba	lcamba 'wash lit 1', Nyanja Isamba 'wash'	CB *-e-s
to / become	*-bā-	kū-ba / kū-kuba		kū-oya	kuwa	CB IN13 optional reduplicated prefix, cf kukula 'eat'
	EN *-bi-	ku-bya 10b soil	kū-oya			EN 1
tea	*-yūmā	lū-souma 11/8/13 / souma 7/12 (coll)		ḡ kanda		CB? *-u-ou

Gloss	CB / EN	N13	N11 ká-ngele	N12	Swahili etc.	Notes
bean	*-kündé	lú-koundi / ngóndi 11/1013/21, lú-ngoundi 11/1013/21	[lú-ngoundi]	ú-salu		CB *-e-ou N11 V2
bear child	EN *-ndondo *-bédik- EN *-cogol-	kú-beleka	lú-ndondo kú-hógola	lú-ndondo kú-óéleka kú-hógola	Yao -cogola 'bear fruit', Tonga kú-soola	EN 2a CB EN 2a
bear fruit beard	EN *-pambik- *-dédú	kú-pambika lú-dehu 1011 lú-ngéhu 11(3) 1hair of body	kú-pambika	kú-pambika	ndévu	EN 1 CB
beast / nit	EN *-njuemba EN *-ciatuli- EN *-lapul- EN *-tob-	kú-hyatula kú-lapula kú-bula kú-likita kú-gomba kú-pomonda kú-kugunda kú-pumund- kú-hona	ma-njwémba kú-tooa	ma-njwémba kú-hyatula kú-lapula kú-tooa kú-likita		EN 2a EN 2b EN 2b f.N 2a EN 2b
beast drum	EN *-tob-	kú-hona	kú-tooa	kú-tooa		EN 2a
beaver rat	*-cengf	[lú-kenzi 5/611/31]			N31 Nyanja [n-chenzi, *ce - che]	CB N13 [+ - lú-hengi]
bed	*bébá 'kind of rat'	kí-tanda7/813	mbéva / lí-beva	m-beva	kí-tanda	CB
bee	*-tándá 'bedstead' *-yúki / júki	[lú-jusi / lú-nzusi 11/1013/1, pl in-zusi]	kítanda [njusi / njuchi]	chí-tanda [lú-njuchi]	nyuki, Nyanja njuc:	CB *-u-u in N13 *-k-s / ch is anomalous in EN For *-ki in second position, cf *-tiki -iki-héki which has skewed vowel in first position. The skewed EN forms are probably of Nyanja origin
bee-hive	*-djngá	lú-kohi 11/1013 [n-singa 3/4111]			m-zinga	<Swahili lú-+CBI N13 [+ - g-hinga]
beer	EN *-gumbi	(u-ighwémbi) 11(1) lí-sáli 5/614 lí-tólu 5/614 lí-pegétai 5/614 tógwa 914a1	gémbei	u-gimbi		EN 1 Simplification of vowel sequence
bee-string (end of) bottle	*-bódá	lú-bála 11/814 lí-ngámwa 5/6 lí-kóutólu 5/6	lú-wala	ú-chwala	Yao utogwa	<Zulu u-tfwala ? CB

Gloss	CB / EN	N13	N11 li-géy ^a	N12	Swahili etc	Notes
begin	EN +-tukulumaci	ti-tukumahi		chi-yenje li-dukulumahi		EN 2b V--VIV N12 Dahl's Law
	FN +-uanj-	kú-wanza [kúhanza]	kú-wanja	kú-wanja		EN 1 ? from following -Sw K(CB)
	• yandj-	kú-tumbula	ku-tumbula	ku-tumbula	kuanza	EN 1
	EN +-tymbji-	kú-longulela				
bell	• -kengedé	kengéli 9/10(1)	kengéle	kengéle	kengéle	CB
bellows		li-ngengeisa 5/6				CB Verbal derivative see 'blow bellows'
bend	• -plnd- 'fold'	q-hugatila? / q-huguto 3/L				
	• -pind-	kú-peinda	ku-peinda / ku-peindama	ku-pinda / ku-pindika	kupinda	CB +-ei in N13
	• -yinan-	kú-jinama	ku-yinama		kuinama	CB
		kú-hunza				
bewitch	• -göb-	kú-muyonga				For the -muy-, see Chpt 1 'NS, Clusters
		kú-göba	ku-béidama ku-gunya			
	• -pén-	kú-pena				CB
	• -tép- 'bend into, sway'	kú-bena				CB?
big		kú-tepa 'become narrower'				CB
	EN +-talambul-	kú-talambula		ku-gundama ku-kunjula	kukunjua	?N12 < Sw ? EN 2b
	• -dög-	kú-hatambula 'unfold'		ku-talambula		
		kú-loga	kú-loga	kú-loga	kuloga	CB
big	EN +-kulungw. cf CB	kú-sopa masöpa				
	• -küdu	-koulöngu	-koulöngu		Yao -kulungwa	ET? K(CB)
	• -néne	-neni			-nene	CB
		-anamalangu				
become big	EN • -baca	-läsu	-uaha	-uaha		EN 2a
	• -küdi- 'grow up'	-ánahota		ku-kula		CB
	• -nénep-	kú-koula	ku-rinopa	ku-nénepa	ku-nénepa	CB
		kú-nenepa				
bugness		kú-lasupa	kúya m-vaha			lcf EN +-baca 'big'
				ku-kurúpala		
	• -néne	ú-koulöngu 1L				lcf EN +-kulungw 'big'
		u-neni 1L(1)				
b'ie	EN baca	u-läsu	ú-uaha	ú-uaha		FN 2a
	• -yöngö	nyöngu 9/10(2)	nyöngo	nyöngu	nyöngo	CB
		kú-kounga				
		kú-mamatika attach				

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
bird	+yuni +dege	kú-bandiktea kú-juni 7/8(11)	ká-yuni lí-dege / ká-dege	chi-yuni chi-dege	ndege	CB N11 & N12 possibly from Swahili. The starred form has a very odd distribution, and Swahili may be independent of the other reflexes
bird lime	+jiba 'kind of pigeon'		njéba		ulimbo	CB
bird lime	+dimbo	u-limbu 12(14)	lémbu	u-limbu		CB *1 - 1 But in N11 *1 ~ el
cite	+dum-	kú-luma	kú-luma	kú-luma		CB
become bitter	+báb-	kú-bába	kú-bába	kú-bába		CB
	+dúd-	kú-loula				CB
black	+yidu EN +pili	-jilu	-pili	-pili -tílu	Yao piliyu, Nyanja bi	CB EN 2a
become black	EN +pila/-	[kú-pilila]	ku-pilila	ku-pilila ku-títuka	Yao -pilila	EN 1 (denominative in N13 and Yao?)
blind person	+póký	[kí-pókú] 2(14)	kí-pókú		kipofu	<Sw (-CB) [+k-h / -y] in N 13
blindness	+póký	[sunu-m-pókú] 7	[kí-m-pókú]		u-polu	CB [+k-h / -y] in N 13 and [+k-f / -y] in N 11
blood	+yadí	u-bóli 12(14)	mw-ási	mw-áhi		CB
blow hot	+koopí	mw-áhi 3(14) m-dómbi 3/4(15)			kofi	<Sw (-CB) [+p-h]
blow hot moutn	+pýd-	[lí-kópí] 5/6(14)	[kú-pula]	'kú-pula	[ku-puliza]	CB *py ~ N13 hu, N11/12 / Swahili fu
blow hot wind	+pép- / +péep-	kú-pepaluka ku-pouga / ku-pougana	ku-pepéruka	ku-pépela	kupepea	CB
blow cold	[fí] +peng-	kú-penga	ku-penga	kú-penga	Yao ku-penga	F 11
blow cold //s	+búgút- / +dyút- / +dyut-	kú-hugatila, kú-hukatila		ku-fukutila	-vukut-	LB
blow away	cf +yánik- 'spread to dry	ku-janula, kú-janakula kú-pougana	ku-yándla			CB Reverse form of +yánik-
become blurry	EN +kisi-	kú-kila kúba mbátu	kú-kila			
boat		lí-bóti 5/6(14)		ku-bútuka	kuwa butu	F N 2c
			méli			<Eng boat
body	+bidi	hyéga 9(2)		m-túmbwi	meti 'ship'	<Sw (-CB) [+p-h]
body	+puté	lí-puti 5/6(11/3)	[mbálie]	yiga m-oli	mtumbwi	No *form constructable
ball			lí-puti	lí-puti	mwili	CB
oil		ku-tutua kú-senusa			jipu	CB N11/12 V2
					kuchemsha	*kw

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
boil up / feel nausea	←-ceduk-	kú-seluka / kú-heluka		ku-tutumuka		CB CB ←-u-u Note the divergent extension in N13 CB ←-e-e
boil up	←-tutumuk-	kú-tutumuka	kú-veila			CB The EN forms could alternatively be derived from an EN ←-cupa See 4.2.4
bone	←-kípa	li-hupa 5/6(11/3)	[li-hupa]		mlupa	EN 2b ←Sw li-CBI N13. [←y-] and [←d-h?] / [←-]
barrel	EN ←-yaci/- ←-yadi/-	kú-jahika [kú-hasima] kú-louba kú-kopa	[li-jege]	li-jege kú-yáhika kú-yásima	kuazima	EN 2c (EB?) CB ←Sw NB N11 ei ~ Sw i
boundary	EN ←-kop-	m-paka 3/4(1)	m-paka	m-paka	kukopa	←Sw i-Arabid Note the divergent final vowel in N13
cow	←-paka		péindei	u-píndi	mpaka	Engl box
box		li-sánduka 5/6	li-sánduku		upindi sanduku	
brain	←-bóngó EN ←-bongulani	li-bókosi 5/6 li-bókosi 5/6 má-langu 6(1) u-bóngu 11(1)	ú-wongulani	u-bóngo u-bongulani	ubongo	CB EN 2a i-CBI
branch	EN ←-mbandi	li-mbándi 5/6(6/5)		li-mbanda		EN 2b Note the divergent final vowel in N12
bread	←-kaaté / -káté	ú-káti 3/4(1) li-bumúnda 5/6	ú-kati	m-káti	mkate	CB N11/12 V2
break	EN ←-kayul-	kú-hekeita kú-tunyula kú-kajula kú-nukula kú-pundula kú-sekula kú-hala / kú-halana kú-sekana kú-balandula kú-balula kú-joula kú-konyola kú-monyola kú-panyola kú-metula kú-hunza kú-bandula kú-mega kú-malamandula kú-halabika		ku-káyula	Yao ku-nukula	EN 2b
	←-kányud- ←-mónyud- EN ←-dony- EN ←-panyul- EN ←-dumul- EN ←-metul- ←-biny- EN ←-bandul-	kú-konyola kú-monyola kú-denyia kú-panyola kú-dumula kú-metula kú-hunja kú-bandula kú-mega kú-malamandula kú-halabika	ku-konyola ku-monyola ku-denyia ku-panyola ku-dumula ku-metula ku-hunja ku-bandula	ku-konyola ku-monyola ku-denyia ku-panyola ku-dumula ku-bandula	Yao ku-konyola 26 ku-bandua	CB CB EN 2a EN 2b EN 2a EN 2c (C) CB ←-mécud- CB EB
break down		kú-tunda k'hum	ku-bungula	ku-halabika	halabika	←Sw i-Arabid Note the difference of extension vowels in N12 and N13
break wind per anum	EN ←-bungul-		ku-bungula	ku-bungula		EN 2a

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
breast	*-bēdē EN *-dajj	li-beli 5/6(11/3)	ki-dāli	li-vele chi-dāli		CB EN 2a
breast bone						
breath						
breath ¹	*-pūm- *-tāntō	ū-fukila 3(1) kū-poumoula ŋ-tāndu 3/1(1)	kū-pūmoula ŋ-tāndu dārāja	ku-pūmula ŋ-tāndu dārāja	kupumua daraja	CB CB N11/12 V2 <Sw [Arabic]
bride						
bring	*-dēt-	kū-lēta	ku-lēta	kū-lēta	kuleta	CB
build	*-jēng-	kū-senga	[kū-jēnga]	[kū-jēnga]	kujenga	CB
burst open	EN *-puyul-	kū-poujoula		ku-pūyula / [kū-foiyula]		EN 2b
		kū-tusula kū-papula 'tear open' kū-balula			Yao ku-tusula	
	*-hadud-		ku-orura ku-pāsula	ku-bāyula	kupasua	CB N11<Sw ?
	*-tūmbud- EN *-kayul-	kū-kasula kū-kajula kū-jwendula	ku-tūmbula	ku-kāyula		EN 2b
bury	*-djik-	ku-taga [kū-sika]		[kū-zika]	kuzika	<Sw [CB] N13 [+d-h / --] N11 [+d-s / --] EN 1 ?
		ku-hyenlafeila	ku-hyeila / kū-syeila dāsi	kū-hila kū-dasi		EN 2a NB EN +d / +s-d / s
busn country	EN -dajj	ku-nddu 17(1)				
bush-buck	*-bābāda	mbābala 9/10(1) mbalāpi 9/10(1)	mbacala	mbālapī		CB EN 2b
butcher	*-cinj- EN *-kom- cf CB *-kom- 'hit with hammer	[kū-sinza] kū-koma	[kū-chinja] kū-koma	ku-chinja / kū-loma	kuchinja cf Yao ku-koma 'hit, beat'	<Sw [CB] [+c-h] in N13, N11 and N12 EN 1 <[CB]
buttock	*-tākō	li-taku 5/6(11/3)	li-daku	li-daku		CB N11/12 V2, Dahl's Law ?
buy	*-gud- EN *-cemel-	kū-hemela kū-lomba	kū-goula kū-hēmela	kū-gula kū-hēmela	Nyanja ku-gula	CB N11 +u-ou EN 1
calve	*-tētīd- / *-tētīd- *-kōkud-	kū-tetela kū-koukuleika lū-hagi 11(3) lū-hāli 11(1)	ku-tetela	ku-tetela		CB
calabash bottle						
	EN *-dēnge *-cupā	li-liengi 5/6(1) li-sūpa 5/6(15/1)	li-dēnge	li-gwatu li-dēnge	Nyanja dende chupa	EN 1 <Sw [CB] [+c-h] Tonally 'multivalent'
calabash	EN *-pyl	li-pēisi 5/5(1)	li-pēisi			EN 2c

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
call	EN + ken- / +kemel-	li-penāngu 5/6/LI kú-kema / kú-kemela	li-penāngu kú-kemela	ku-kemela		EN 2c EN 1
cane rat	+cēngj +hebā 'kind of rat' +kupē 'tick'	[[li-kenzi] 5/6/LI/3] li-kupi 5/6/LI/3]	[[li-chenje] mbēua	m-bēua		CB [+c-h] and [+ngj-?] CB CB EN 2c
cane	EN +-lungalungu	ñ-dungalungu 3/L ñ-kota 3/LII] 'maize / millet cane'	ndōungalungu			
cannon	+djogā	[ñ-singa] 3/LII]	[ñ-zinga]	mzinga		<Sw [-CB]
canoe	+yāto	bwātu 3 or 14/5a]	wātu			CB
captive		ma-tēka6/LI]	mā-tēka	mā-tēka		<Sw ?
caress	+pāpatj-	kú-papaha	kú-pyēha		kupapasa	CB N13 Loss of semivow-1?
carry	+pāap-	kú-toutoula kú-papa	kú-bāba	kú-bāba kú-gēga		CB N13 p-b in N11 & N12
	+tūt-					
carry in arms	EN +-pind- +tōd- 'pick up' +pākat- 'hold child'	kú-jemzeiha kú-pēnda kú-tola kú-pagata / kú-pagatila kú-jouba / kú-joubeka	Nyanja -tuta 'carry from place to place' kú-pēnda kú-pagatila	CB +u-ou kú-pinda kú-tola		EN 1 CB CB Dahl's Law?
cast skin			mōno	mōno		CB
castor oil	+mōnō	f-mono 10/LI]				CB
castor oil bean	+mōnō	tj-mono 11/8/LI]				CB
castor oil plant	+mōnō	ñ-mono 3/4/LI]				CB
castrated	+tēén- 'cut'	kú-tena	kú-tena	kú-tena		CB
cat	EN +-mbunyali +pākā	mbunyali 9/10/LI] kú-tena	li-mbunyali pāka li-pūsi li-hyōmi	pāka pūsi chi-hyōmi chi-māmū pāka-wa-mādas		EN 2c CB <Eng 'pussy cat' ? No EN form constructable
cat (wild)		ki-sōmi 7/8/LI]			Yao come	
catch	+yānk- +kāmud- 'seize'	kú-jānga kú-kāmula	kú-yānga kú-kāmula	kú-yānga kú-kāmula	Yao ku-kāmula 'seize' kudaka	CB CB
cat (domestic)	+bungū	li-bōungu 5/6/LI]	li-wōungou	kú-daka li-wūngu		?N12 <Sw ? CB

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc	Notes
cattle	EN *-nyanyambu	li-nyanyambuhi 5/6	gombi	chi-nyanyambuhi	gombe	EN 2b CB NI1/12 V2
cattle pen	*-gombē	gombi 9/10/21 li-beigi 5/6/11 ki-sisi 7/8/11		gombi		
cave	EN *-baya	li-kōlu 5/6/11	ki-oyaya	chi-oyaya / li-oyaya	ki-zizi Zulu isi-baya	NI3 & NI2 < Swahili EN 2a or < Zulu ?
cease	EN *-koly	li-kōlu 5/6/11	li-pāngu	li-pāngu	pango	EN 2c EB NI1/12 V2
chaff	*-pāngō	ku-leka ku-kotoka ku-ketuka	ku-leka ku-kotoka ku-ketuka	ku-leka ku-kotoka ku-ketuka		CB EN 1 EN 2b
charcoal	EN *-timba	li-jōhū 5/6/16/51 ma-timba	ma-timba	ma-timba	Yao lma-timba 'fine ground maize'	EN 1
piece of charcoal	*-kādā EN *-kalakala	ma-titila / ma-sisila li-kalakala 6	ma-titila / ma-sisila li-kalakala	li-kalakala	m-kaa / ma-kaa	Cases of phonosthetic variability: no exact correspondences can be suggested CB Reduplication only reported from EN
chase	*-bing-	ku-binga ku-haka	ku-ueinga ku-haka	ku-unga ku-haka		CB *-i-el CB *-c-h
chase	*-cāk- 'drive forward'	ku-binga ku-haka	ku-kémbélsa	ku-kémbélsa	kukumbiza	Causative forms *-CB *-kimbud- 'run'
chase	*-dóng-	ku-lóngela	ku-lóngela	ku-lóngela	kuonga	CB
cheer	*-tāmā	li-tuku 5/6/11/31	li-tama	li-tama	kifua	CB
chest	*-kijbā	pā-mwoju 16/11	ki-fuoa	chi-lua		CB CB loc of mwōju 'heart' -CB *-yōyō
chew	*-tākyn-	[ku-sakula] [ku-sakula]	[ku-dakula] [ku-dakula]	ngānga [ku-dakula]		CB NI1 and NI2 probably from 'S Zone language' (Zulu CB *-tākyn 'chew', with its derived 'catalyn' has reflexes widespread in Zone S NI1 and NI2 *-t-od by Dahl's law and *-un- 'ult.' by pressure of phonological system in certain position EN 2b
chicken	EN *-memen-	ku-memena ku-kajagula ku-mugunya	ku-memena	ku-memena		CB
chief	*-mugunl-	ku-mugunya	ku-mugunya	ku-mugunya		CB
chicken	*-kukū	li-gouku 9/10/11 li-bāna 'chick' 11/8/51	ngōdu	ngōdu	kuku	CB CB?
chief	icf *-yāna 'child'	bāmbu				This form is now more commonly used for 'Mr., Sir', etc
child	*-yānā	mw-āna 1/2/21	mūtwa	g-kōsi		CB
child	*-dēdj	ki-lehu 7/8/31	mw-āna	mw-āna	mwana	CB
child	ETI *-njuemba		ki-nywēmba	chi-nywēmba	kidevu	CB [11.23]

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
choke	EN *lakji-	kú-lakila	kú-lakila	kú-lakila	Yao -laciwa	EN 1 <Zulu
choose	*-caagud-	kú-hagula, [kú-sagula]	kú-nyonga lyósi	kú-hágula	kuchagua	CB *c-h, Alternate N13 form < Sw ?
crop up		kú-heikatana kú-kelea kú-sekulana	ku-dumula			
chivet cat	*-tyngó	ká-hungu 12/13/11	li-hyóumi / li-ghyóumi	ku-kéyula kú-uanga	fungo	CB
clan	*-kódo	lú-kólu 11/10/6/5/	lú-kolo	lú-kolo	ukoo 'kinship'	CB
clap /hands/	*-gomb-	kú-gomba mánja	kú-kouua mánja / kú-kouua ngóofi kú-toda mánja	ku-bambátilla má-woko mánja		
clapping of hands	EN *-manja	mánja 6/2/	mánja	lú-koufi / ngóofi	cf Nyanja, manja 'hands'	EN 1
clay	EN *-tupi /cf CB *-topé 'mud'	ú-toupi 12/11, lú-trupi liti, li-toupi 5/6/11, kí-toupi 7/8/11	li-doupi			EN 2c N11 Dahl's Law
become clever	*-kengid-	swákallai 9/1a/	swákala	lú-daka	chokaa	<Sw 12-1 English 'chalk'
clap away	EN *-buki-, cf CB *-búki-, rise up, igo away	lú-senzela *-kengela		chókala	Nyanja -conjer- Bemba -cenjer-	<Sw 12-1 English 'chalk' ? <Nyanja or Bemba ?
cloth	EN *-tambala	kí-tambala 7/8	ki-tambala		kitambaa	EN 1 (causative?)
clothes	*-gubb	ig-goubu 9/10/11	ngówou	nyúla	nguo	EN 2b N12 Dahl's Law
clothe oneself	*-djád- / *-dját-	kú-hwata / kú-hyata (obs)	kú-fwata / kú-hwala	[kú-wara]	kuvaa	CB
clothe someone else	*-dját-	kú-hwatika	kú-hwatika / ku-hwátika			CB
	*-djik-	kú-hweika 'to adorn a bride and escort her with gifts to her broom's house'				
cloud	*-djindé	li-hundi 5/6/11	li-fandi, (li-hándi)		Yao lunda li-hyndi	CB N11 V?

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
coagulate	←gānd-	kū-gānda ku-hwira 'freeze'	kū-funda	kū-ganda	kuganda	CB
cockroach	EN ←-kukukulu	lu-kūlakūlu 11/10	li-kouloukoulou	mbelembende li-kururu mbepu / [māpu]		EN 2c. N13 extension vowel FH 2b CB N11/12 V2.
cold	←pepo	li-ngāniwa 5/6 li-kūlūlu 5/6 ki-pepu 7/8(3) / im-pepu 10(3)	mbepu			
become cold	←pūd-	kū-himāla kū-pola kū-bagaja 'tremble with cold'	kū-pola	ku-sisima		CB
colour		lāngi 9/10(4a)	rāngi	lāngi	rangi	<Sw: Hindi or Persian
comb 1, b 1	EN ←-kuemul-	[kū-kwebula]	ku-kwemula	ku-kwemula		EN 1 N13 [EN ←m-m]
- in	EN ←-kuenula	[ki-kwebula] 7/8	ki-kwemula	chi-kwemula		EN 1 N13 [EN ←m-m]
come	←pik- 'arrive' ←būed- ←kūm- 'come from'	kū-hika kū-pita kū-homoka / kū-holomoka kū-kopoka 'come out of socket' kū-kouleika 'come out of socket'	[kū-hida] / [kū-hicha]	kū-bwela kū-huma kū-pita kū-huma kuwala kū-homoka		CB N11 [←k-k] Lexical Variability in N11? CB CB EN 1
come / go out	EN ←-pit- ←-kūm- 'come from'	kū-pita	kū-pita		kuchomoka	CB
come off	←-cōmuk- 'come out of thing poked in'	kū-homoka / kū-holomoka kū-kopoka 'come out of socket' kū-kouleika 'come out of socket'	ku-homoka		Yao -konok- 'exude' Yao -kulik- 'come out of socket'	
come back	EN ←-kūlibuk-	ku-buja kū-kelelabuka	ku-ke- .wuka ku-huma	ku-kiriwuka		EN 1 N11/13 Extension vowel CB
come from	←-pūm- / ←-kūm-	ku-huma	ku-yingila	ku-yingila	kuingila	CB
come in	←-yingid- / ←-yingid-	ku-jingila	ku-ngena		Zulu ukungena 'go / come in'	EN 1 N11/13 Extension vowel CB
come out of water	EN ←-cubuk-	[kū-hougouka]	kuhūwouka	ku-hūwuka		EN 1 N13 [EN ←b-b]
come down	EN ←-cyluk-	kū-huluka	[ku-suluka]	ku-huruka		EN 1 N11 [EN ←c-h]
come up	←-cēdid-	kū-helela		ku-hēfela		CB
command	←-kūed- 'go up'	kū-kwela				CB
contradict		kū-hamulisa	ku-āmrisha	ku-āmrisha / ku-āmrisa	kuanrisha	<Sw: Arabic
cover	←-tēdik-	kū-peinga	ku-peinga		kupinga	<Swahili ? CB
become covered	←-pī-	kū-teleka	ku-tēleka			CB
cooking stone	←-piḡa	kū-kupa / kū-pa li-higa 5/6(1/3)	kū-pya li-higa / li-higa	kū-pya li-higa / li-higa	figa	CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
cool down	←pōd-	kū-pōla	kū-pōla	kū-pōla	kupoa	CB
cord / string	←d['string	[ū-si] 11/12a)	ū-kufu ū-goyi	ū-zi	uzi	<Sw [-CB] N13 [+d-h / -i]
corpse	←gōy / ←gōyi			nyōst		CB
	←kūjā / ←pūjā / ←tūjā dead person	maiti 6 or 9/10(L)	maiti	mū-fwa	maiti	<Swahili CB
cotton	←tōngē	[li-tonzi] 5/6(1)	li-tōny		Nyanja -thondze, Yao li-tonje	<Yao(-CB) N13 [+g-g]
cough (vb)	EN ←koccomol-	kū-kohomola / kū-komola	[kū-gohomola]	kū-kohomola / kū-kohola	Icf Sw kukohol	EN 1 Phonesthetic influence ?
cough (nl)	EN ←koco	lū-kohōkono 14	[lū-gohōgohō]		Icf Sw kikohozil	Deverbative
count	EN ←balang-	kū-baha kū-balanga	kū-ōlānga	kū-ōlānga	Yao kuwalanga	EN 1
country	EN ←lima	ŋ-deima 3/1/11	ŋ-deima	ŋ-lima		EN 1
court, yard	←bānjā	lū-banza 11/8(3) / kī-banza 7/8(3)	lū-banza		uwanja	CB
cousin		bināmu 1/2(1)	bināmu	bināmu	binamu	<Sw [-Arabic]
cover (vb)		kū-hyeika / kū-hyeikaleila	kū-fweika			No +form reconstructable
	ZEN ←kupik-	kū-kupika / kū-kupakila	kū-gubākila	kū-gubākila	ML2(Bembal: uku-kupika	ZEN 1 NB Double application of Dahl's Law
	←djb- 'stop up'	kū-hibatila			Yao -unik-	CB
	←kūnik-	kū-bunika				CB
cover (nt)	(←kūnik- 'cover')	kī-hyeikaleila 7/8 [ŋ-punikū] 3/4(1)	li-njēŋhe / [li-njēŋhe]	ŋ-lunikū	mluniko	Deverbative Icf kū-hyeikaleila ? <Sw [-CB]
crab	EN ←njigi	li-nzēgi 5/6(6/5)		li-njigi		EN 1
cray	EN ←kenya EN ←kenyeŋi	li-kenya 5/6(11/3)	li-kényesi	li-kenya li-kényesi		EN 2b EN 2a
crack		ū-luba 11(1)				
		kū-baluka kū-kenyamuka				
crawl	EN ←kuab-	kū-kwaba	kū-lēnda kū-kwāba	kū-kwaba	Yao -kwawa, Nyanja -kwawa	EN 1
kind of cricket	←yēnjē	li-nyāgi 5/6(1)	kī-yenje	chī-yenje		CB
crocodile	←guinā	[li-gwina] 5/6(11/3)	[li-gwina]	li-gwina		CB N11 & N13 forms imply nasal augment (from earlier Class 9/10) and Ganda Law or a special treatment of the sequence -ggw- sequence -ggw-
cross bridge	EN ←yombok-	[kū-lomboka]	kū-yōmboka	kū-yōmboka	Yao kū-jomboka, Nyanja kū-omboka	EN 1 N13 IEN +y ~ j]

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
crossing place			li-yomboko			
land off crowd	←-kúngúúú EN ←-mbanga	li-koungúúú 5/6 li-mbanga 5/6/11 kú-peinda	li-koungúúú / li-koungouru li-mbanga	chi-kúpusi li-kungúú li-mbanga ku-pindika	kunguru kupinda	CB EN 1 ←Swahili?
become crooked			ku-bé/dama			
crust i.e. food in pot	EN ←-kogoto	ki-kogótu 7/6	ki-kogoto	chi-kogoto		EN 1
crunch	←-kúkut-	kú-koukatola	ku-bubúúúú			CB
cr /	←-dlid-	kú-leila	kú-leila	ku-dákula	kulia	CB
cudgel / club	EN ←-bonga	ki-bonga 7/8/13	[ki-bonga]	kú-uemba		EN 1 See 4.2.5
cultivate	←-dim- EN ←-gab- EN ←-temang-	kú-leima kú-gaba kú-temangalela	kú-leima	kú-lima kú-gaba kú-temanga	kulima Yao -gawa 'cut up'	CB EN 2b EN 2b
cup	←-kómbè	ki-kómbi 7/8/14	ki-kómbi	chi-kómbi	kikombe	CB N11/12 V2
become cured	←-pón- ←-dam-	kú-pona kú-lama	kú-pona kú-lama	kú-pona kú-lama	kupona	CB CB
cure	←-pón- ←-dam-	kú-ponya kú-lamisa	ku-pónesa kú-lámisa	ku-pónesa	kuponya / kuponesha	CB CB
curse	←-dap- 'swear' EN ←-líg- EN ←-tem- mbamba	kú-lapa 'swear' kú-liga kú-tema mbamba	kú-liga	ku-lá-pisa mbamba kú-liga kú-tema mbamba	kuapa 'swear'	CB EN 1 EN 2b
cut	←-tém-	kú-helkeita kú-tema			Yao -tema	CB
		ku-seipula kú-nukula kú-jaba kú-balula kú-peingula			Yao [-ceculal] Yao -sepul- Yao l-nukula 'snap'	
	EN ←-dumul- EN ←-metul-	kú-metula kú-tula	ku-dumula ku-metula	ku-dumula		EN 2a EN 2c
dance	←-bín- ←-kin-	kú-hina kú-kina kú-jenzela	kú-yata [kú-hina] kú-kina	[kú-hina] kú-kina	Yao ku-tula 'cut rope'	CB 11/12 12 CB
dangle						
dark	EN ←-pílal-	[kú-pílal]	ku-pílal	ku-lémbela ku-nigula ku-pílal	ku-nigina Yao -pílla	2N12 ← Swahili ? EN 1 N11/12 extension vowel See 4.4

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc	Notes
darkness	EN *-yiti	lu-hi 11121	lu-hi	chi-tita		EN 2c 5a-e 4.1
daub	*-māt-	kū-mata	kū-mata			CB
day	EN *-kilim- *-yūba 'sun'	kū-kilima ly-ōba 5111 / [l(-soubā)5/613]		ku-gándika ku-kirima		EN 7b CB 1113 [+y-0]
day-time	EN *-gono	mū-hu 18	li-gono [mū-si]	li-gono		[N] 2a
day before yesterday	*-ci	kwisu 17 15a1	li-chana jousi	mū-hi		CB 1111 [+c-h]
day after tomorrow	EN *-mataby	pa-malābu	[pa-malābu]	ku-tāngi		EN 2c 1111 [EN *-b ~ w / -u]
dead person	*-kijā / *-pijā / *-tjā			ñi-fwa		CB Sw kifo-CB*-kyō
death	*-kū	li-lēni 5/614	kī-fu	chi-fu		<Sw kHindi
deceit	EN *-kong-	kū-konga 115111 kū-nienga	li-dēne kū-kōnga	li-dēni kū-konga	deni	EN 1
deceive					Yao -nyenga, Nyanja -nyenga	
delicate	*-tund- 'urnate'	kū-tunda	ku-tūnda	kū-tunda		CB
delay	EN *-kabakili-	kū-kabakila		ku-kaakila	kukawia, Yao ku-kawa kuchelewa	EN 2b <Swahili
deny	*-kān- EN *-bel- [N] *-yim-	kū-kana kū-jima kū-pala	ku-kana	ku-dorola ku-tamākisa		CB
desire	EN *-gan-			kū-bela / ku-belālela kū-yima		EN 7b
					Yao ku-pala 'seek after [women], hunt'	
					Nyanja -gana 'choose husband', Zulu ukugana 'marry husband'	EN 2a <Zulu
dev	*-mī / *-mē	ū-lu-mi 1211	ku-nōgela	kū-funa		<Zulu uku-funa 'want' ?
die	*-kū-	kū-hwila / kū-kuhlila	ñ-noungou / ndoungou	m-betu		CB
difficome tool difficult	EN *-nonop- EN *-yunduk-	kū-nonopa kū-junduka	kū-fwa ku-nōnopa	kū-hwa ku-yunduka	kula	EN 2c EN 7b
difficulty				ndindani		
dig	*-cimb-	ku-himba	ku-himba / ku-heimba	ku-himbula	kuchimba	CB

Gloss	CB / EN EB ←-pɔkud-	N13 kú-hukula	N11 ku-fukula	N12 ku-gima ku-hilula ku-hikula	Swahili etc kufukua	Notes <EB?
dip		kú-tobela	ku-sheílula ku-sheilémbula			
dirt		u-sápu lɛtɛ	kú-yna / ku-yínika u-cháfu	hákau	uchafu	<Sw {Arabic}
(become) dirty	←-cáákad- 'become worn out'	kú-sapuka kú-hakala	ku-hákala	ku-cháfuka	kuchafuka kuchakaa 'become worn out'	<Sw {Arabic} CB
disappear	{←-cób- 'lack'} EN ←-yag-	kú-hoba	kú-hoba kú-yaga	ku-hoba kú-yaga		CB EN 2a
dish up	EN ←-yokol-	kú-jolola	ku-yókola	ku-bákula	Yao ku-jokola	EN 2c
dislike		kú-sukiha	ku-hakálila	ku-hakálila	kuchuka	<Swahili EN 2a
divide / share out	EN ←-cakalll-	kú-gaba / kú-gabana	kú-gava	kú-gava / ku-gavana	kugawa / kugawanya	CB
do	←-kít- EN ←-ceng- ←-tënd- 'act'	kú-kita kú-henga kú-tenda	kú-kita kú-henga	kú-kita kú-henga	kutenda	CB EN 1 CB
dog	←-búa ←-búa	ji-m-bwa 9/10/15a/6a ji-ana-ká-bu 9/10	li-bwa nya-ká-wa / na-káwa	li-bwa	mbwa	CB CB N13 the form appears to be connected with CB ←-yana 'son' and CB ←-buda 'dog'. The -ba- in between is the CI 12 and CB ←-buda 'dog'; the -ba- in between is the CI 12 nominal prefix. Compared to Jinjwa, Janakadu bears derogatory overtones. N11 ku- and nya- are interesting to explain ←-yaga and ←-yokol- special NC 9 relatives ?; but ←-ba- NC 12 prefix as in N13 and ←-wa -CI; ←-búa
door (-way)	←-diángó	ñ-dyangu 3/L11	ndyangu	ñ-lyangu	mlango	CB N11/12 V2
draw (water)	←-ték-	kú-teka	kú-teka	kú-teka ku-nega imānji / ma-si	kuteka	CB
dream	←-dóót-	kú-lota	kú-lota		kuota	CB
dream	←-dóótó / ←-dóótó	ndáto 9/10/12	ndáto	ndáto	ndato	CB
drink	←-nyū-	kú-nyulwa / kú-kunylwa	kú-nywa	kú-nywa	kunya	CB
drip	EN ←-culul	kú-houloula	ku-háuloula	ku-dónyoka		EN 2c
driver ant (see also 'army ant')	EN ←-jangali	kú-sesateka	li-sangali	li-sangali		EN 2a
drive away	←-bing- 'chase / chase away'	kú-beinga	ku-ueinga	kú-unga		CB

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
drum	*-cak- 'chase'	ku-haka		ku-haka		CB
become dry and hard	*-goma / -goma *-yüm-	ig-oma-9/1011 kü-yuma kü-kakatuka	goma kü-yuma	goma kü-yuma	ngoma	CB Sw - CB *-goma CB
cause to dry	*-yänik- *-yüm-	ku-janika ki-langási 711 u-lümü / pa-lümü 11 or 1511	ku-yänika ku-yümesa	ku-yümisa chi-langási	kuanika kiangazi	CB CB <Swahili ? Derivative of *-yüm- 'dry' ?
dust	*-gymbi	[lu-hömbi] 11/611	ki-koŕu / ki-köŕu lu-fömbi / [lu-hömbi] lu-böbu ma-dákall	lu-hömbi	vumbi	CB N13 & N11 [+y - u]
dwell	EN *-tam-	kü-tama	kü-tama	kü-tama	Yao -tama 'sit, dwell'	EN 1
fly, fly off eagle	EN *-mbanga *-pungu *-kütü	li-mbanga 5/611 li-kütü 5/611	ká-pungu / li-pungu li-kütü	li-mbanga		EN 2b CB
eat	*-di-	kü-la / kü-kula	kü-ya	njéoe kü-ya	kula	CB N13 obsolescent forms kü-ya / kü-kula CB [+y-u]
egg	*-tjmbi *-yäy-	[li-hömbi] 5/616/51	li-hömbi	li-hömbi li-yäy li-kaga	yai	CB
flight	*-näné	näni	näni	näni	nane	CB N11/12 V2
eloquent	*-témbo	ndémbu 9/1015a1	ndémbu	ndémbu	tembo	CB N11/12 V2
elusive		ú-lehi 1111	lése	ú-lehi	ulezi	<Swahili or EB ? EN 2c
become emaciated	EN *-kombal-	kü-kombala	kü-kombala	kü-ganda		
end in		mw-íšu 311a1	mw-íšu	mw-íshu	mwisho	<Swahili or EB
end up	*-mäd-	kü-jomoka		ku-máika	ku-maliza	CB
entice / woo	EN *-cong-	kü-koulouha kü-honga		kü-honga		EN 2b
entreat	*-bämb- 'entice'	kü-bembalesa		ku-bembéŕesa / ku-bembesa	kubembeŕeza	<Sw 1-CB1? Vowel Ext in N13
become equal / fitting	*-dingan-	kü-leingana		ku-lingánila		CB
escape	*-dingan-	kü-leinganeila		kü-tifa	kuroroka	CB EN 2b N11<Swahili ?
evade	EN *-til-	kü-tila	ku-tóŕoka	kü-yepa	kuepa	CB
evening	*-yëp- 'avoid'	kü-jepa	ki-mñhi	chi-mñhi	joni	EN 1 <Swahili ?
	EN *-lilimici	pi-k-f-himihii 16		jloni		

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
exchange		kú-badilisa	ku-badilisa	ku-badilisa	kubadilishana	<Sw [K/Arabic]
excreta	←-b[l-mā-hi	mā-hi	mā-hi	mavi	CB
extinguish	←-djm-	[kú-simisa]	[ku-simisa]	[ku-simisa]	kuzima	<Sw [CB] N12 [ed-h / -s] Unusual Causative Ext. N11 Unusual Causative Ext N12 [ed-s / -s]
	←-djm-kú-himula 'cool down'	kú-susua			CB	
extract (honey)	EN ←-bakul-	kú-genga lbusi	ku-bákula (sáli)	ku-bákula (sáli)		EN 2a
extract (thorn)	EN ←-comol-, cf CB ←-cóm- 'pierce'	kú-tupula (mwihai)	ku-hómola	ku-hómola (míngal)		EN 2a [CBI]
eye	←-yíco	lí-hu 5/6(12)	lí-hu	lí-hu	jucho	CB N11/12 V2
eye brow	←-kígé	lí-higi 8(13)				CB
eye lash	←-kópé	lú-ngopi 9/10(13/11)	gópi / ngópi	ngópi	kope, Yao lukope, Nyanja cikope 'eyelid'	CB N11/12 V2
eye lid		kí-koupaleila 7/8	kí-koupaleilei	lí-gubákú		Note discrepant final vowel
face	←-cú	pá-mi-hu 16(11) / kú-mi-hu 17(11)	pá-mi-hu	pá-mi-hu / kú-mi-hu		CB
face towards	←-déd-	kú-lola	kú-lola	kú-lola		CB
fail	←-dém-	kú-lemá 'not to be able to hold any longer'	kú-sindwa		kushindwa	<Swahili ?
fall		kú-habuka				
famine / hunger	←-jádá	lí-zala 9/10(11)				CB
become fat	←-nénep- 'become big' (←-kúdu 'big')	kú-nenepa	ku-nénepa	ku-kurúpata	kunenepa	CB Derivative of CB ?
father	←-tááté	a-táti 1/2 (1)	dádi	dádi		Meaning subject to variability
fault		lí-kósa 5/6 (1)	lí-háko			<Sw [Persian]
fear (vb)	←-yógup-	kú-jogopa		chí-lemá		CB
fear (nf)	(←-yógup-)	lú-jogopu 11	wágoi	wágoi		CB Deverbatives
feather	EN ←-ngoma	lí-ngóma 5/6(12)	lí-ngoma	lí-ngóma		EN 1
feed	←-di-	kú-feha	ku-fíza	ku-líha / kú-lísa	kulisha	CB Causative form of CB ←-di- 'eat'
fence	←-big-	kú-betga	kú-veigha	ku-ogálila		CB
fence	lcf v. ←-big-1	lú-beigu 12(13)	lú-veighu	lú-olgu		CB Deverbatives
few / little	EN ←-debe	-soku / -sokop-	-debe	debe		EN 2a

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
become / little	+-kēp-	kú-kepa				CB
fight (b) / wail	EN +-kondo	ngōndu 9/10/21		ngōndu	Yao ngondo	EN 2b
fight (vb)	EN +-koman- cf CB +-kōm- 'hit with hammer'	kú-komana		ku-kōmana		EN 1
filter	+-cūj- 'strain liquid'	[kú-suja]	[ku-hōjua]		kuchuja	<Sw I-CBI [+c-h]
	EN +-kugund-	kú-seseha kú-kugunda		ku-kugunda	Yao ku-kuunda 'shake out'	EN 2b
filter / strainer	EN +-kugundu ICf v +-cūj-)	if-kugundu 5/6 [kí-suj] 7/8/11		li-kugundu	kichujo	EN 2b Deverbatives <Sw I-CBI. Deverbatives As for the loss of the final vowel in N13, note that the final compound vowel is usually lost in loan words from Swahili, e.g. N13 ki-bani < Sw kibani 'clothes-peg'.
find	EN +-tondol- +-bōh- 'see'	kú-humbula kú-tondola	ku-tōndola			EN 2c CB
finger	EN +-konj	lú-konzi 11/10/21	lú-konji	[lu-ngonji / lú-gonji]		EN 1, N12 Result of Backformation ? NC 10 N13 ngōnzi, N11 ngōnzi, N12 ngōnzi / gōnzi
finger-nail		s-dūbu / hy-dūbu 7/8/21	lú-fwouwu / fwouwu	lú-hyuuu / hyōwu		No reconstructible form
flush	+-nād-	kú-jomola	kú-mala / ku-málaka	kú-mala / ku-málaka / ku-málisa		CB
fire	+-yótō	mw-ōtu 3/4/21	mw-ōto	m-ōto	moto	CB
fire place	+-y[ka]	ku-j-iku 17/11 / n-2-iku 18/11 / li-j-iku 5/8/11			jiko	<Sw I-CBI. Note the obligatory pre-prefixes in the N13 forms
	ICf +-yótō 'fire' EN +-cinja	pá-mwatu 16/11 kí-hinza 7/8/11				CB
fire-wood		lú-hanzu / hānzū 11/10/3/21		chi-hinja		EN 2b
			lú-bawu / mbāwu			
fish	+-cōmbá	hōmba	[sōmba]		Yao. somba, Nyanja insomba	CB [+c-h]
fish (with a hook)	+-dōb-	kú-loba				CB
fish-hook	+-dōtām	lú-besa	[ndowāna]	ku-l[ōpola / ku-l[ōpola lú-ōcha [ndowāna]	Yao ku-laposa [ndowana]	No EN form constructable N13 < N12 ? <Sw I-CBI?
fish-trap			lw-āfu / ny-āfu	m-gono		EN 2a
fish snail	EN +-yafu			lw-āfu / ny-āfu		CB
fit (vb) / fitting	+-digan-	kú-leinganila kú-tosa / kú-tosela		ku-lingānila	kulingana kulingana kutosha	<Swahili ?
five	+-cāānū / +-cāāno	[g-hwanu]	m hānu	m-hanu	tano	CB [+ca -- hu]

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
fish-container	EN ++tenga	li-tenga or (li-ndenga) 5/614	li-tenga		tenga 'large container'	EN 2c for EBI ?
flash	++mũdik- 'shine' EN ++guetuk-	kũ-mũhĩ a kũ-gwetuka		ku-gwetuka	kumuhika	<Sw I- CBI EN 2b
flesh / steak	++nũkũ	ũ-nũhũ 3/411		ũ-nũhũ / [ũ-nũhũ]	mnũhũ	CB N12. [+k-f / -y] CB
fling up earth	++pũk- / pikud-	kũ-hũka / kũ-hũkũla				
float	++yẽdĩd- EN ++yebel-	kũ-jetela kũ-jebela		kũ-taga liũdaka	kuelea	CB EN 2b
flour	EN ++cembe	ũ-hembũ 14/13	[sẽmbẽ]	ũ-hembẽ		EN 1 N11 [EN ++c-h]
flow	cf ++nyik-	[kũ-nyika]				
flower	++dũbũ	li-tũbũ 5/611/31 'blossom', li-ũwa 5/614	li-tũwa	ku-trĩrika [li-ũwa]	kutĩrika ũw	?N12 < Swahili ? CB Skewed forms < Swahili
housefly						
fly	++gũduk-	li-bũmbũ 11/8 kũ-goulouka	ku-goulouka	ku-mbũrũka / ku-mbũrũwũka	[kurũka]	CB
foam	EN ++cũlũcũlũ ++pũdũ	li-hũhũhũ		li-hũhũhũ pũfũ	pũfũ	EN 2b CB
fog	++kũngũ	li-kũngu 5/611	li-kũngũgũgũ	li-kũngu	ũkungũ	CB Reduplication in N11
fold		kũ-kũnzũ / kũ-kũnzũ kũ-hũnzũ			kũkũnjũ	<Swahili?
	++pĩnd- ++kũny-	kũ-peĩnda kũ-kũnyũla 'fold to snap' kũ-mũnyũnga 'twist'	kũ-gũnyũ		kũpũnda	CB CB
follow		kũ-pwata kũ-beĩngaleĩla			kũfũata	For the Cluster 'nyy-' see Chapter 1 <Swahili
food	++dũnd-	kĩ-tĩbũ / (-tĩbũ 7/915) s-akũ-lũ / ny-akũla 7/814	kũ-lũnda	kũ-lũnda	chakula	CB Deverbatives
foot / leg	++gũdũ IC f ++gẽnd- 'walk / travel'	kũ-gũlũ 15/611	kĩ-gũlũ	chĩ-gũlũ chĩ-gẽndũ	ngũũ	CB CB
foot-print	++yũyũ	liw-ũju 11/1012	liw-ũju	liw-ũju	unyũyũ	CB
forehead	EN ++bũngũ	kĩ-bũũngũ 7/814	kĩ-wũũngũ	chĩ-wũũngũ		EN 1
forest	++tũtũ	[ũ-sũtũ] 3/411	ũ-sũtũ	ũ-sũtũ	msũtũ	IC f [+t-h / -y] N13 form < N11 or N12 or Swahili
foretell	++dũgũd-	kũ-lũndũla	kũ-lũgũla	ũ dũsĩ / kũ-dũsĩ kũ-lũgũla	kuagũũ	CB

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
forge	*-pōnd-	kú-ponda		kú-ponda		CB
forget		kú-jetig'wa	ku-yelulella			
four		ñ-sesi		ku-kosewa / ku-kosiwa		No reconstructable EN form
friend	EN *-koj]	ñ-kosi 1/2(L)	ñ-kosi rafiki	ñ-cheche [m-kōzi]	rafiki	EN 1 N12 [EN *-s] N11 <Swahili
fr-ghien	*-yōgup- 'fear'	kú-jogoha	ku-yōgofya	ku-yōgofya	kuogofya / kuogopecha kutisha	CB Causative forms <Swahili
frog	*-yūda 'kind of frog'	kú-tisa			chura	CB N13 is skewed in that it contains an epenthetic [-ngu-] N13 <Swahili ?
		[ly-ung'ila] 5/6(L)				EN 2a
front	EN *-nyoto		li-nyoto	li-nyoto		
front	ICf *-dōngud- 'go ahead'	ku-lōngi	pa-lōngolo	ku-lōngolo	mbele	CB
fruit		li-tunda 5/6(L/3)	li-tunda	li-tunda	tunda	N12 <Swahili Note however N12 mū-mbele means 'behind'
'ry	*-kādang-	kú-kalanga	ku-kalanga	ku-karanga	kukaanga	<Swahili or EB?
become full	EN *-tūlil- *-mēm-	kú-twelilela	kú-mema	ku-twifila kú-mema ku-lefikia		CB EN 2b CB
tur	EN *-luagi		lw-āgi	lw-āgi		EN 2a
garden		ki-joungu 7/8(3) bustāni 9/10(L) ñ-guunda 3/4(L) also 'field'	bustāni	bustāni	bustani	<Sw [Persian] CB
gather up		kú-kusanya	ku-kusanya	ku-kusanya	kusanya	<Swahili or EB CB
gather fruits	*-būng-	kú-bounga		li-ōala li-dimba		
gather firewood		kú-toungoula				
		kú-tina / kú-tunya				EN 2c
gather vegetable	EN *-yab-	kú-jaba kú-kaba				CB
gather people	ICf *-pjk- 'arrive'	kú-hikanila		ku-hikanila kú-nonga ku-kōngana "assemble"		
get	*-pat- 'hold'	kú-pata	ku-pata	ku-pata / kú-pewa	pupata	CB
giddyass	*-djūngu	ki-sungusūngu	ki-syūngusū	chi-lyungusi		
giddiness	*-djūngu	[ki-sungusūngu] 7	ki-syūngusū	chi-lyungusi	kizunguzungu	CB 1+ d-h / ...] N13 <Sw [CB]

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
gift		sawādi	zawādi ndimrou	zawādi	zawādi	<Sw (Arabic)
girl	*-yādi	ka-mw-āli 1/2(L)	ka-mw-āli	hōmbolu		CB NC 2 N13 aka-ka-niw-āli, N11 os-ka-mw-āli / os-ka-ōāli
	*-kādī-ānā	m-būmba 1/2(L) n-sikana 1/2	n-sikana		ICf msichana	CB Note the metathesis of *kādī >> *dika in this situation
give	*-pā-	kū-peikeha	kū-pela	kū-pela		CB Extensions of *-pā-, i.e. -pā-t-d- - -pēd- Or possibly from *-pe-Dative Ext
give g't	*-tjip-	kū-hupa				CB Special meaning in N13, usually associated with gifts given to bride & bridegroom
gnaw	EN *-puenj-	kū-gwena kū-memena	kū-gwenya [kū-gwēgwena]	kū-gwenya / [kū-gwēgwena]	Yao -memena	EN1 N12 [EN *-nj- -ny-], also Reduplication
go	*-yēnd-	kū-jenda				CB
go past / pass	*-pit-	kū-peita	kū-peita / [kū-beta]	kū-pita	kupita	CB N1 [p ~ pi] Dahl's Law
go ahead	*-dōngud- ICf *-yēnd-'go'	kū-longulela kū-endelea	kū-longulela kū-endelea	kū-longulela kū-yendelea	kuendelea	CB
go away	*-būk-	kū-bouka		kū-wuka		CB
go back	EN *-kilbuk-	kū-keilabuka kū-buja	kū-louta kū-keilawuka	kū-kiriwuka		EN1 Divergent Vowel Ext in N13 and N11
go down	*-cēdid- *-tūdduk-'come down'	kū-helela kū-huluka	kū-hélela / [kū sélela]	kū-hélela		CB N11 [+c ~ h]
go down / glide	*-tjēd-	kū-tyelambuka		kū-tyélela	kotereza	CB
go out	EN *-pit-	kū-pita	kū-pita	kū-pita		EN1
go up	*-kūkd-	kū-kwela kū-huka [of smoke]	kū-kwela	kū-kwela	Yao -kwela	CB
go in	*-yīngid-	kū-jīngila	kū-yīngila	kū-tukalof smoke kū-yīngila kū-ngena	kunga Zulu tuku-ngena "enter"	CB <Zulu
go off	[Reversive of *-tjip-'stop up']	kū-hibuka			kuzibuka	CB
goat	*-būd EN *-mene	kū-holomoka im-buhl 9/10(I)	mbūhi mēne	mēne	mbuzi	CB EN 2a Or - *pēné goat
the goat	*-pōngō	li-pōngu 5/6(L)				CB
good	EN *-a bwina	-nyahi	-a bwina	-a bwina	M2 [Bemba] bwina "well"	For the cluster -ny- see Chapt 1 EN 2a Or [Bemba] nyanja 212

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
God	+dũngũ [C] +pang- / +pang- plan	[Mũngu] Sapanga		Chapanga	Mungu	<Sw I-CBI CB Deverbative
grains	+cengā	lũ-sēnga / sēnga 11/105/5a) hēngalētr 8				CB
grandchild	+jũkũdũ	ŋ-soukoulou 1/2 11)	[ŋ-choukoulou]	[m-jukulu]	mjukuu	CB N11/12 [+j-s]
grandfather	+kũkũ [C] +jũkũdũ 'grandchild'	[a-houkũ] 1/211)	soukoulou	[hukulu]		CB [+k-k] CB [+j-s]
grandmother	EN +mbyya	a-nbũja 1/211)	mbũya	gogo	Nyanja gogo grandfather; grandmother	EN 1
grass	+nyatĩ +nyatĩ	It-nyāhi 5/616/5) lũ-nyāhi 11/615)	It-nyasi	mbũya	Shona mbyya, Cewa mbuyanga, Yao mbuye 'grandparent'	CB CB
grasshopper	+pādĩ 'kind of ant'	It-pāhi	[It-pārahĩ]	It-nyahi	nyasi	CB Note the insertion of -ra- in N11
burnt grass	+piā	u-lũpi 11/11)	lũpi	It-dede It-mbarānguli zaidodo It-hokohoko bafuta namjōnjoma		It is the lack of a general word for 'grasshopper' in N12
grave	+tō	It-kabũhi [mi-tu 11)	It-kabũri [mĩtu] m-chuzi	It-kabũli	kaburi	CB Reduction of compound vowel in both N13 and N11
grind	+ciag- / +tjag-	kũ-hyaga	It-nyasi	m-chuzi	mchuzi	<Sw I-Arabic
grinding stone [bigger]		tw-āla 11/1012)	tw-āla / my-āla	ku-hyaga	kusaga	CB [+o-o] <Swahili
grinding stone [smaller]		[n-zhu 9/1011)		It-ganga 11a kuhāgāla)		CB EN 2c
grope	+pāpatĩ-	kũ-papaha		mbokoto		CB
ground	+ci	pā-hi 1612)		ku-pāpasa	kupapasa	CB
groundnut	EN +labĩ	It-lābi 5/611)	It-lābi	It-tēele		EN 2c
group		It-kūndi 5/611) ki-kōsi 7/811)	It-kūndi	chi-kūndi / 11-kūndi	kundi kilosi	<Sw or EB <Swahili
grow	+mēd-	kũ-mela germinate	kũ-mela	ku-mela	kumea	CB

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc.	Notes
growl	CB +--kud- / +--kud- +--kudum- +--kém- 'grunt with effort'	kú-koula 'grow up' kú-koloma kú-kekema kú-nguluma kú-buluma kú-nugunika kú-nwenga	kú-koula	kú-kula	kukua	CB CB CB Reduplication
grumble	EN +--bulum- +--nugunik-		kú-buruma	kú-guruma kú-buruma kunugunika	kunguruma Benba -bulum- 'roar'	<Swahili? EN 2b Or phonaesthetic elements? CB
guinea fowl	EN +--jundu	lí-súndu 5/6(16/5) bundúki 9/10(1)	lí-chúndu bundúki	lí-chúndu bundúki	bunduki	EN 1 <Sw (Arabic). This item is, presumably, also derived from Persian and Hindi
shoot with a gun		kú-poujulella		kú-túyula / kú-tuyulila		
hair	EN +--yinyu +--jidi	lí-junzu 5/6(1)	lí-yónju nywili	lí-yónju nywili ú-boya / mš-boya 'hair on body'		EN 1 CB Sw nywele 'hair' - CB +--yýede
hammer	+--yündö	nyündu 9/10(2)	nyündu	nyündu		CB NI1/12 V2
hand / arm	+--böbö	kú-boku 15/6(1)	kí-woko	chí-woko		CB
l palm of hand	+--gánjā	kí-ganza 7/8(1)	lí-limba	lí-limba	kiganja	CB
hand piano / xylophone	+--dimbā	lí-limba 5/6(1)				CB
harue	+--pini EN +--yaka	m-pini 3/4(1) s-aka 7/8(1a) kú-mnyonga	ky-aka	ch-aka	mpini	CB EN 1
hang				kú-mnyonga	kunyonga	<Swahili? For the distinction between -ny- and -mny- see Chapter 1, under 'Clusters'
hang up	EN +--kobek-	kú-kobeka		kú-kobeka	Shona -kopéka, longa kobeka, Cewa -kobama 'hang loosely down' Yao ku-koleka	EN 2b
hang up to dry	ICf +--yánik- 'spread to dry' +--býn- EN +--ben-	kú-koleka kú-janika kú-huna				CB
harvest			kú-bena	kú-bena kú-kolowola	kuvuna, Yao ku-una	CB EN 2a
harvest maize		kú-husa				CB
harvest cassava	ICf +--climb- 'dig'	kú-heimba				CB
harvest beans, etc		kú-tupula				CB
harvest canes, etc	ICf +--tem- 'cut down'	kú-tema				CB
kind of hawk	EN +--mbanga	lí-mbanga 5/6(1)	lí-mbanga	lí-mbanga ka-dohela mútu chi-bwanga		EN 1 CB
head	+--tú	m-mútu 3/4(1)	mútu			

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
head pad		mbũmb 5/10(L)		chi-lĩmba	kĩlamba 'turban, etc'	N12 <Swahili
ibe in health	+dām- ICf. +yĩmuk- 'rise up'	kũ-lama 'recover from illness' kũ-jĩmuka	kũ-lama	kũ-lama kũ-yĩmuka		CB CB
heap	+dũnd- 'store up / add to' +dũndik- 'add to'	ĩl-lũndu 5/6(L)		ĩl-lũndu		CB Deverbalive
heap up		kũ-lunda / kũ-lũndika	kũ-lunda / kũ-lũndika	kũ-lũndika	kũlũndika	CB
hear	+yũgy-	kũ-jũhwa / kũ-jũhwanella		kũ-yuwa / kũ-yuwana		CB
	+pũdik- EN +pũtik-	kũ-pũlika kũ-pũlikanella 'hear'	kũ-pũlika	kũ-pũlika		CB Obsolescent in N13 EN 1
heart	+yũyb +tĩma	mw-ũyu 3/4(L)	mw-ũyo	m-ũyo ũt-tĩma	moyo	CB CB
ibecomel heavy	EN +top-	kũ-topa	kũ-topa	kũ-tũpela		EN 1
height	+tĩdl 'long, length'	ũ-lĩsu 14(L)	ũ-tali	ũ-tali		CB
help	EN +tangatil-	[kũ-jangátĩla]	kũ-tangátĩla	kũ-tangátĩla	Cewa -thangata	EN 1 N13 EN +t-t]
hem	+minik- +pĩnd-	kũ-minika kũ-pĩnda		kũ-mĩnika		CB CB
hicc up	+kũkũl	kĩ-ngwĩku 7/8(L)	kũ-gũnyz kĩ-gwĩku	chi-ngwĩku		CB Note that all the three forms agree in the loss of the final composite vowel
hide	+bje- / +pjc-	kũ-hĩha	kũ-fĩha	kũ-fĩha / [kũ-hĩha]	kufĩcha	CB N12 [+b o *p ~ / -j]
hill	EN +tũmbi EN +dũnda +dĩmā	kĩ-tũmbi 7/8(L) ũ-deima 3/4(L)	kĩ-tũmbi kĩ-dũnda	chi-tũmbi chi-dũnda	Yao li-tũmbi	EN 1 EN 2a CB
hip				chi-dũli		
hippopotamus	EN +ndomondo	ndomũndũ 9/10(L) kĩ-bũku 7/8(L)	ndomũndo	ĩl-wondo	Yao ndomondo kĩboko	EN 2c <Swahili or EB
hit	EN +gĩatul- +tũb- EN +lapul- +bũd- EN +lĩkit- +pām-	kũ-hyātula kũ-lapula kũ-lĩkita kũ-pomonda kũ-pamanda kũ-ponda	kũ-tooa kũ-bũla	kũ-hyātula kũ-tooa kũ-lapula kũ-lĩkita	Shona -rapura 'whip' Shona -rikita	EN 2b CB EN 2b CB EN 2b CB
hoe	+gēdā	ĩl-gēla 5/6(L)	ĩl-gēla / [ĩl-yēla]	ĩl-gēla ĩl-mbārara		CB N11 [+g ~ or gh]
hold	EN +kamul- cf CB +kāmud- 'seize'	kũ-kamula	kũ-kāmula	kũ-kāmula	Yau -kamula	EN 1 <CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
	+pakat- 'hold in arms'	ku-pagata / ku-pakata	ku-pagata	ku-pagata	kupakata	CB. Dahl's Law in N13, N11 and N12 ?
	+kumbat- 'hold in arm / hand'	ku-humbatila	ku-fumbatila		kufumbata	CB
home village	+kaaya	pa-kaaya / ku-kaaya 16 or 17 (5)	li-kaya	ku-kaaya / kaa		CB
hole	ICf +nyumba 'house'	ku-nyumba 17(4)		ku-nyumba	nyumbani	CB
honey	+yuki / +yuki	li-bũmba 5/6(6/5) li-hũtu 5/6(6/5) [bũtu] 14(2)				CB [+k-ka, +ki-hu] <Swahili or EB?
honour		ku-heshimu	lalsali	asali	asali	<Swahili or EB?
honour (n)		isima 8 or 10 (4)	ku-heshimu	ku-heshimu	kuheshimu	<Sw [Arabic]
hool		lũ-besa 11/8(5)	heshima	heshima	heshima	<Sw [Arabic]
hope	EN -ndobana, cf CB +dũbani		ndowana	ndowana	ndwana	EN 2a <EB ?
horn	+cuubid-	ku-hubalela		ku-hualila	kutumaini	CB Sw subiri < Arabic ? <Swahili
	EN +nyeli	[li-nyeli] 5/6(6/5)	ku-tumaini	li-geli		EN 1
	+nyanga 'tusk / horn'	nyanga 9/10(2)	li-geli			CB
become hot / warm	+piup-	ku-pyupa		baragumu 'blowing horn'	baragumu	?N12? < Swahili
hot season		ku-pyupa		ku-pyupa		CB
		ku-kohela		ku-kohela		
house	+nyumba	ku-langasi 7 (4) u-lumu / pa-lumu 14 or 16 (4)	nyumba	chi-langasi	kiangazi	EB or <Swahili ?
how many	+dinga (ADJ)	nyumba 9/10(4)	nyumba	nyumba	nyumba	CB
hunger	+jada	-leinga	-leinga	ganda		CB
hunt	ICf bing- 'chase'	in-zala 9/10(1)	njala	njala	njaa	CB
		ku-beinga	ku-hyunga			CB
hunter				ku-zingila	* kuwinda	N12 < Swahili
hurt	EN +bin-	ku-bina	ni-hyongi	ku-winda		Deverbative IC ku-hyunga 'hunt'.
husband	+dumè	ni-dumi 1/2(3)	ku-oina	ku-oina		EN 1
			ũsi			CB
				ni-ngwana		Also used for 'man, male adult'
				bambu		
				m-kambaku		Also used for 'man, male adult'
hyena		li-pundu / li-pundwa 5/6(6/5)				

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc	Notes
I			li-howo / li-howo	li-hogo		No regular correspondences at C2
(become) ill	*-né	ne / nénga	nénga	ne / néne		CB
illness	*-dúad-	kú-lwala	kú-lwala	kú-rwala		CB
		u-gónzu 11/12		u-gónjwa	ugonjwa	<Swahili or EB NI3 resolution of final composite vowel> EN 2c
imitate	EN *-tany	u-tamu / ki-tamu 11 or 7/8 11	u-tamu			
	*-yig-	[kú-jha]	kú-yeiga	kú-yiga / ku-yigiza	kuga / kugiza	CB: [+g ~ g]
infect	*-yambuk-	kú-jambukha / kú-jambukila	ku-yambukisa	ku-yambukisa	kuambukiza	CB
inheritance		u-lisi 11/12	u-rithi	u-rithi	urithi	<Sw (Arabic)
(become) injured	*-démad-	kú-umia	ku-lémala	ku-lémala	kuuma	CB
inside	*-kátí	ú-kátí 18/12	mú-gati	m-gati	ndani	<Swahili
	*-dā	mú-nda 18/2 'inside the abdomen'				CB Dahl's Law in NI1 and NI2 ?
insect	*-ntú 'thing'	lú-ndu 11/12	ngoko	chi-ngokoko		CB
	EN *-ngoko			chi-dúdu	mdudu	EN 2a
(become) intoxicated	ICf *-dáb- 'get wet'	kú-lobela	kú-gala	kú-gala		<Swahili
irrite	EN *-gal-					CB ?
	*-dádik-	[kú-halika]			kualika	EN 2a
iron	EN *-kemel-	kú-kemela	ku-kemela	ku-kemela		<Sw [-CB] [+d-]
	*-yómā	s-duma 7/8/12	ky-duma / ch-duma	ch-uma	chuma	EN 1
island		ki-swa 7/8/12		[chi-husa]	kiswa	CB
itch	[-túkut- 'perspire']	kú-tuguta	kú-tuguta	kú-tuguta		<Swahili
jackal		li-bwéha 5/6/15/1		li-bweha	mbweha	CB Dahl's Law applies
				li-bwa la mdasi		EB ?
(become) jammed	*-pátid-	kú-kwama	kú-kwama	kú-kwama	kukwama	EB ?
		kú-patila				CB
		kú-kanalla				
jar						
join by tying	*-túgg- / *-túgg- 'thread on string'	kú-tounga	kú-tounga			CB
	EN *-kung-	kú-kounga	kú-kunga	kú-kunga		EN 1 ?< preceding
journey		sapwáli	safári	safári	safari	<Sw (Arabic)
	EN *-yanja	mw-anja	mw-anja			EN 2c
		u-lendu 11/12			Nyanga, Yao ulendo	Guthrie enters these forms in a partial series, but finds the tones skewed
jump over	EN *-cumb-	kú-homba	ku-hyétuka			EN 2b
	EN *-cietuk-	kú-hyétuka	ku-hyétuka			EN 1

Gloss	CB / EN	N13 kú-tanya	N11	N12	Swahili etc.	Notes
kidney	+-pígú / +-pígò		li-figu	ku-nyatukila	figu	CB N12 [+p -- / --]
kill	+-kóm- 'hit with hammer'	kú-koma	kú-koma	kú-koma		CB
kinship / clan	+-kódò	li-kólu N15	{li-kolu}	li-kolo	ukoo	CB N11 [+r -- o]
knead	EN +-cuny-	kú-hunya		kú-hunya	Shona & Chewa -lunya 'fold, curl up', Tonga -fwinya	EN 2b
	+-kánd-	li-kú-kanda	kú-kanda	kú-kanda		CB N13 special meaning 'prepare mud, cement, etc for daubing or building'
knee	ICf +-kúkám- 'kneel'	li-púgu 5/6(L)	li-fugámilu	li-fugámilu li-góti	goti	CB
kneel	+-kúkám-	kú-peiga má-goti			kupiga magoti	<Swahili CB
knife	EN +-pamba	m-pámba 3/4(L)	ku-fugama m-pamba	ku-fugama m-pámba / chi-ñipamba		EN 1
	+-pú	[kú-su] 7/8(L)	chi-púla	chi-pula	kusu Yao cipula, Tonga im-pula 'short-bladed spear'	<Swahili EN 2a
knave / become lacking	+-pógò	u-pánga mbópo 9/10(L) 'scythe'		u-pánga	upanga Yao mbopo	CB
knock at the door		kú-houtima				
knock down		kú-pouta				
knock	EN +-kaq-	kú-kanga		ku-lótola kú-kaga		See Ch 4
	EN +-kogond-	kú-kogonda	kú-gonga kú-kogonda	kú-gonga kú-kogonda	kugonga	<Swahili EN 1
knót	+-kúndò	li-húndu 5/6(L/S)	li-lúndu	chi-lúndu / [li-húndu]	tundo, Yao li-undo	CB N12 [+k -- / -- u]
knóv	+-mánj-	kú-manya	kú-manya	kú-manya ku-dalála	Yao ku-manya	CB
lack / become lacking	+-cób-	kú-hoba 'become lost'	ku-kosékana	ku-hóeka ku-kosékana	kukosékana	CB <Sw [Persian]
ladle		m-púndi 3/4(L)		ndéoe		
lake	+-nyánjá	nyánza 9/10(L)	nyánja	nyánja		CB
lame person	+-démá	ki-léma 1/2(S)		chi-léma chi-wéte	ki-lema kiwete	CB N12 <Swahili
l(b)ecome lame	+-dém-	li-lémaha / ku-lémaleka	ku-lémala	ku-lémala	kulemaa	CB
laugh	+-cèk-	kú-heka / ku-hekala 'smile, rejoice, become glad'	kú-heka	kú-heka	kuchoka	CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
laughter	←-cākō	lū-heku 11/8111	lū-heku	chī-heku	kicheko	CB N11/12 V2
land	ICf ←-dīm- 'cultivate / till land'	ñ-deima 3/4111	ndēma	ñi-lima		CB
lay eggs	EB ←-tag / ←-tagi/- ?	kū-tagila	kū-tagila	kū-tagā	kutaga, 'áo ku-tagila	EB Guthrie connects with ←-táy 'throw away', which seems doubtful. But we have here, as fairly commonly, a word which could reflect cognate origin pre EN but past CB. We could therefore best label it as ←-tēg
lead way	←-dōngud-	kū-longoha	kū-lóngosa	kū-lóngosa kū-lasa njila	kuongoza	CB
leader	ICf ←-dōngud- 'lead way'	ki-lóngōsi	ki-lóngōsi / ka-lóngōsi / m-ki-lóngōsi	chī-lóngōsi	krongozi	CB Deverbative
leaf	EN ←-camba	li-hamba 5/6111	li-hamba	ñi-lasá-njila li-hamba	M12Bembal ama-samba 'tea-leaves'	EN 1 ?
leaf	EN ←-culul-	kū-houloula	kū-houloula	kū-hūrura		EN 1
put/ leaning	←-yégik-	kū-jegeka kū-heneka kū-jinamisa	kū-jegeka kū-heneka kū-jinamisa			CB
	ICf ←-yīnam- 'bend over'					CB
	ICf ←-ping- 'put across'	kū-pengeika	kū-pengeika			CB
lean on	←-yégam-	kū-jegamala	kū-jegámala	kū-yegémela	kuegamea	CB Note discrepancies in Extension Vowels
learn	←-yig-	kwi-liboula				Reflexive of kú-boula 'teach' i.e. kú-boula > ←-kú-li-boula > kw/-liboula
leave	←-búuk- 'rise up / go away'	kū-bouka	kū-wouka	kū-wuka	Makonde -wuk- Shambaa -uk- 'go away'	CB
	←-dek-	kū-leka	kū-leka	kū-leka kū-hamba		CB
	←-yénd- 'go'	kū-jenda				CB
left hand		ikwanámangéja	mangéja	mándyoli		J-g cannot be explained
leg / foot	←-gūdū	kū-goula 15/6111	ki-goulu	chī-goulu chī-géndelu	mguu	CB
	ICf ←-génd- 'walk, travel'					CB Deverbative
lend	←-yādīm-	[kū-hasima]	kū-yásima / kū-yasimisa	kū-yáhika	kuazima/ kuazimimisha	CB N13 [←y - j, ←dj - hi]
	EN ←-yacik-	kū-jahika				EN 2b
length	←-tādī	u-tāli 'distance'	ú-tali	ú-tali		CB
leopard	←-cūbī	ki-houbi	li-souli	chī-huot	chul	CB
letter		balúa	barúwa	barúwa	barua	<Sw / Arabic

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
lick	←-damb- ←-kamb-	kú-lamba kú-kamba	kú-lamba kú-myanga	kú-lamba kú-kamba	kulamba kukomba ML2/Bemba	CB CB ?
lie across	←-kingam- ←-ping- 'put across'	kú-keingama kú-péingama	kú-keingama kú-péingama	ku-pingika		CB CB
lie down	←-gón-	kú-gonetla	kú-gona pási	kú-gona páhi		CB
lie on one's back	←-gón-	kú-gone hángalagája	kú-goná njanja	kú-goná njanja		CB
loutt lying	←-gón-	kú-gonaka				CB
loutt lies	EN ←-kong-	kú-konga	kú-konga kú-deta	kú-konga		EN 1
lies		l-edli 8/L1	ú-desi			
life	←-jumi	w-óumi 11/21	w-óumi	má-geu		CB <Sw 1<Arabic
lie	←-yumi	-óumi	-óumi	maisha		CB
light fire		kú-pambakika / kú-pambakila / kú-pamba mwótu			Yao ku-pamba	
light fire	←-kódi- ←-yóki- 'roast, burn' ←-yák-	kú-koha mwótu [kú-jesa mwótu]	kú-kosa mwótu	kú-koha mwótu		CB CB N13 [←ki-hi]
become! lit	←-yák- Eti ←-nagan- ←-dang- 'shine'	kú-jaka kú-nagana	kú-yaka kú-najana	kuwaka kuangaza		CB EN 1 CB
lightning flash	EN ←-nbamba	ki-tobi 7/8/11 mbamba 9/10/21	mbamba / [mbamba]	mbamba	Cewa mbamba emphatic oath 'let the lightning strike me'	EN 1 N11 [←b - b]
become! light in weight	←-pépuk-	kú-pépuka	ku-pépuka			CB
become! alike	EN ←-yuyuk- ←-púanan- 'resemble each other'	kú-joujouka [kú-pwanana] / kú-hwanana / kú-hwanana	ku-yúyuka ku-fwaningana	ku-yúyuka ku-hwanana		EN 1 CB N13 [←py - hw]
form line of objects	←-dingan- 'become equal' ←-dóng- 'arrange' / ←-dóngò 'line of objects'	kú-leingana kú-longa	kú-leingana	ku-lingana	kulingana	CB
line		ñ-sitáli	ñ-stári	ñ-stári	mstari	<Sw 1<Arabic
lion	←-cjmba	li-himba 5/6/11/31	li-himba	li-himba	simba	CB
lip	←-dómò	ñ-domu 3/2/11	ñ-domo	ñ-lomo	mdomo	CB
listen in silence	←-yúgy- ←-yúgy-	kú-joulgiwaneila kú-joulgiwana	[ku-hyoudouneila]			CB N11 [←g - g] CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
listen	EN *-plik-	ku-pelleika / ku-pelleikanela		ku-plikisa	Yao: -plikania	EN 2b
liver		li-thini			ni	<Swahili ?
listen (in silence)	*-yugy-	ku-yougiwana / ku-yougiwanella	[ku-hyouduneila]			CB
monitor lizard	*-budi	li-sousouli 5/6 li-boulaboundu 5/6	li-woulououndu	li-nikwakwa		CB
load	*-dige	[i-sigul 3/4/L]	i-sighu	[ni-zugu]	mzigo	<Sw [CB] N13 [*] -hu], N12 [*dj ~ si]
locust / grasshopper	*-padi 'kind of ant'	li-pahi 5/6/L	[li-parahi]			CB N11 [*dj ~ si / li]
long	*-da *-tadi	-lasu li-tali 'distant'	-tali	-tali		CB Final syllable of deverbative origin?
'Zacoma' long	[C] *-da 'long' [C] *-tadi 'long'	ku-lasupa [ku-taluka 'become distant / keep one's distance']	ku-talika	ku-talika		CB Denominative CB Denominative
length	*-da	u-lasu 'height / length'		ku-luluma		CB
look	*-tadi	lu-tali 'distance'	i-tali	u-tali		CB
look at	*-dod- *-ding- 'search for'	ku-lola ku-linga ku-bona		ku-lola		CB CB CB
look for	*-dod- *-ding-	ku-lolakeha ku-lingalila				CB CB
look after child	*-dond 'search for'	ku-pala ku-lenda				CB
lose	*-ding- *-ded- *-cbb- 'lack'	ku-linga ku-hoha	ku-lela	ku-lela	kulea	CB CB CB Causative
lost	EN *-yac- *-cbb-	ku-hoba	ku-hoba	ku-hoba		EN 2a CB
house	*-da	i-li-la / i-ma-la 5/6 (L)	li-sosoro	li-sosoro		CB EN 2a
become mad	EN *-jojoro	ku-youka mangungu				EN 1
madness	EN *-peng- EN *-pengy	ku-penga lu-pengu 1111	ku-penga lu-pengu	ku-penga lu-pengu	Shona, Tonga, Cewa -penga 'became mad'	EN 1 EN 1 <EB?
magical	*-bungu	li-bungu 5/6/L	li-soumi	li-bungu		CB
magical				li-feganya		

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
maze	EN ++lombj	ki-lômbi 7/8(L)	li-lômbi	li-lômbi		EN I
maze cane		û-kota 3/L111				
make	++tënd- 'act'	kù-tenganesa	ku-tengenesa		kutengeneza	<Swahili or EB
	++páng- 'arrange'	kù-tenda			kutenda	CB
	++bûmb- 'mould'	kù-panga	kù-panga		kupanga	CB
	pottery	kù-boumba			kuumba	CB
	++kít- 'do'		kù-keita			CB
make oil	++yèng-	[kù-genga imá-huta]	kù-yenga imá-huta			CB [+y ~ j]
male	l*-yána 'child' + +dumé 'male' / husband	-ánaloumi		kù-huja imá-huta		CB
man	l*-yána 'child' + +dumé 'male' / husband EN ++goj	mw-ánaloumi 1/2	-kambaku			CB
man / much	++yíngi EN ++a macele	-íngi / -íngipi		m-gosi	-íngi	EN 2a
marry		kù-honga kù-punga ndóhila kù-jukúhái m-bómba 'take wife'	gési g-kambaku	li-doda		<Zulu, in-doda 'married man'?
	EN ++tugul-	kù-tougoulla m-bómba		-a máhele		CB
	++tóbó- 'take'	kù-tollai m-bómba			kufunga ndoa	EN 2a
marriage		ndóhila 9/10(L)	ndówa ndóuwouisi			<Swahili
mat	EN ++paja	ú-lethi 14(L)	m-pasa D-kéka	m-pasa		EN 2a N11, <Swahili
mat, re	++kud- 'grow up'	kù-koula	kù-koula	kù-kula	mkeka	CB
	++kóm- / ++kómád-	kù-komallai	kù-kómala		kukomaa	CB
mé	++né	né / nénga	nénga	néne		CB
més, re	++plm-	kù-puma	kù-péma	kù-pima	kupima	CB
mús, re	++plmb	ki-peimu 7/8(L)	=[vi-peimu]		kipimo	CB N11 [+o ~ o]
méat	++yámá / ++nyámá	i-nyama 9/10(L)	nyama	nyama	nyama	CB
médre, mé	EN ++tela	m-téla 3/14(L)		m-téla	Yao mteka, Nyanja m-téka, Tonga mu-cela 'medicine lit 'fruit'	EN 2b

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
medicine man	+gàngà	ú-gànga 1/2(1) / s1-gànga 1/2(3)	gànga / gànga / gànga / gànga	m-goda	dawa	<Swahili
meat	Cf +bón- 'see'	kú-kertanella kú-bonangana	ku-woningana	m-ganga	mganga	CB
milk (cow s)	+djà	[má-siba] 6(3)	li-sua	kú-konga / ku-kóngana / ku-kónganeke	maziwa	<Sw [~CB] N13 [+dj ~ hi], N12 [+dj ~ s1]
milk (mother s)	+béde	li-beti 5/6(1)	li-oèle	[ma-zíwa]		CB
milk	+kám- 'to milk'		li-kama			CB
millet	+pémibá	li-pemba 5/6(1/3)	má-pemba	má-pemba		CB NCS in all the three languages refers to 'millet grain'
multipede	+góngódó	li-gongolo 5/6	li-góngolo	li-góngolo		CB
make a mistake	EN +bud- cf CB +bud- 'become lacking'	ku-kosa / kú-kosehla	kú-buda	kú-buda	kukosa / kukosea	<Swa EN 2a
may / become mixed	+càngan-	kú-sanganya / kú-hanganya / kú-hanganyika / kú-sanganyika	ku-hanganya / ku-basingana / ku-hanganyika	kú-hoka	kuchanganya / kuchanganyika	CB More lexical variability especially in N11 and N12
may / to sit	+gégó	li-gégu 5/6(1)	li-póúleita	li-gégu	gégó	CB NB 2nd Vowel in N12
may	+pýkò / +pýku	ku-húku 7/8(1)	li-chenje	fuko		Deverbative from EN +pud- 'pound'
moon	+yéj	mw-éhi 3(2)	[mw-éze]	[mw-ézi]	mwezi	CB N11 [+s] ~ i], N12 [+dj ~ s1]
month	+yédj	mw-éhi / my-éhi 3/4(2)	[mw-éso]	[mw-ézi]	mwezi	CB N11 [+s] ~ i], N12 [+dj ~ s1]
moonlight	+bád- 'shine' + +yéj 'moon'	lu-balámwehi II	[mbalamwéze]	[mbalamwézi]	mibalamwezi	CB Deverbative + +yéj 'moon' Skewing as in 'moon' q.v
morning	EN +kela, cf CB +kédo	pu-lu-kélu / pu-lu-kéla 18+11(1)	lu-kéla	lu-kéla		EN 1
mortar	+túdf	li-touli 5/6(1/3)	li-touli	li-túli / li-tuli		CB
mother to	EN +jububu	[lu-húgububu] 11/10	sóúwouwu	sóúwuu	Yao njenje	FN 1 N13 [FN +s ~ s], [EN +b ~ b]
mother	EN +njenje	lu-nzénzéma 11/10	máwu	njenje	Nyanja amai / Yao amao	EN 2b EN 1 or perhaps phonosthetic influence?
	2EN +maby	a-mábu 1/2(1)	máwu	máwu		EN 2c
	EN +nyongulul	a-nyóngúliul 1/2	nyóngoulou	nyjina		CB
	+nyókò		nyókò	nyjina		CB
	+nyíná		nyjina	nyjina		CB
mould better /	+bumb-	kú-bumba	ku-wumba	ku-wumba	iluumba create	CB
mourning	+didó	ki-lelu 7/8(1)	ki-lelu	má-lelu	kiho	CB V?

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
mouth	←-domò	ñ-domo 3/4 III	ñ-domo	ñ-lomo	mdomo	CB V2
move one's residence	←-tām-	kú-hama	kú-hama	kú-tama	kuhama	CB
mud	←-tòpè	má-topi 6II			tope	CB
	EN ←-tupi	li-kandu 5/6II liú-toupi 'clay' IIII	lu-doupi	liú-daka / má-dakali ndógoda		EN 2c Dahl's Law in Manda INIII ?
mush / porridge	EN ←-guall EN ←-ngondola	ú-igwari 12II li-ngondola 5 ú-ji	gwáli	li-ngondola wúji	ujj	EN 2c Sw ugali - CB ←-gadi EN 2b ←Swahili or EB ?
mushroom	←-yogà	bw-aga 12I2	w-aga	ngówani	uyoga	CB
name	←-gñà	li-hina 5/6I6/5I	li-hina	li-hina	jina	CB
nasal mucus	EN ←-cyndika	li-hundika 5/6	[li-fwíndika]	li-hundika		EN I Epenthetic -i- in NII [Ch L]
nave	←-kúby / ←-kúgy	ñ-kuhu 3/4I3I	ñ-kufu	chi-tófu	kitofu	CB
near	←-yipi 'short'	[pá-mb-ipi]	pá-p-ipi	pá-p-ipi		CB Adj + MC I6 prefixes Epenthetic -m- in N13
- iputi near	EN ←-ceg-	kú-hegakeha / kú-hegalela		kú-hegalela / kú-hegalela		EN 2b
neck	←-k[ngò	ñingu 9/10I2	singu	singu	shingo	CB V2
niece / nephew	←-yipúa	mw-ípwa 1/2I2	mw-ípwa / [mw-ípa]			CB the interesting development CVV > CV is anomalous in NII
nest	EN ←-jengijana	ki-húhi 7/8LI / u-húhi [ki-kasakasa] 7/8 'type of container'	ñ-sengisana	ñ-sengésana		EN 2a MB -i- in NII vs -e- in N12
net	←-yábú			chi-sakásaka	Shona chi-tsaka	EN I Metathesis in N13
night	←-dò	li-ki-lu 9I2I	ki-lu	[w-ávu]	wavu	CB NII [+by - fu] N12 [+by - fu] N12 < Swahili ?
nose		li-mbulu	mbúnu	ki-lu	Yao cilo	CB V2
ibercompe numerous	EN ←-yolok-	kú-joloka		mágetu		EN 2b
oath	←-dápò	ki-lapu 7/8II	ki-lapu	chi-lapu	kiapo	CB V2
imare and oath	←-dáp-	kú-lapa		kú-lapa	kuapa	CB
obscure	←-djb- 'stop up'	ku-hibaila		ku-hibikisa		CB
	←-djb- 'stop up'	ku-hiba		ku-pingálla / ku-pingila	kuziba	CB
	←-ping- 'put across'	kú-pinyajella				CB
oil	←-gytá / ←-kýtá	má-huta 6I3I	ku-yánanga	[má-huta]	mafuta	CB NII & N12 [+gy or +ky - fu]
imake oil	←-yeng-	[kú-henga]	kú-yenga			CB N13 [+y -]

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc.	Notes
	←-kám- 'squeeze / wring'			ku-kama Imáhutai		CB
clw 3sg	EN ←-jeja	u-séja 1/211	u-séya		Cf Shona utseye 'old age' lat wómóni	EN 2c Cf 'old person'
old person	EN ←-gogolo		ú-ghoghólo	u-gogolo		EN 2a Cf 'old person'
	EN ←-jeja	n-séja 1/211	n-séya	m-gogolo / ngógholo		Cf 'old age'
	EN ←-gogolo		gogolo	m-kulu		Cf 'old age'
	←-kúdu	samám	mákouda ya mágono ya mwándi		zamani	CB
older times						←Sw (←Arabic)
older / elder brother	←-bádi 'first born'	m-béi 1/211	máma	kadéni		CB NI3 used only to refer to a boy's elder brother
	EN ←-cája	g-hasa 1/213		m-hacha		EN 2c NI3 -ch- in NI2 NI3 used only to refer to a girl's (elder) brother
	←-kúdu	káka		káka mibaha m-kulu	kaka	←Sw (←Persian) + CB
older / elder sister	←-bádi 'first born'	n-doumbu 1/211				Used only to refer to a boy's elder sister
		m-béi 1/211				CB Used only to refer to a girl's elder sister
one	←-mó	-mu	-móna	m-himbu		CB
one	EN ←-móna			-móna		EN 2a
oaze		kú-sweka	kú-houloula			
	EN ←-culul-	kú-houloula		ku-lendémuka		EN 2c Cf 'leak'
open	←-dýgud-	[kú-hougoula]				
	EN ←-dindul-		ku-déindula	ku-dindula		CB [+y - u]
open mouth	EN ←-yam-	kú-jama		ku-yámula	Shona -shama, Yao -jashama	EN 2a
			ku-yáyula			EN 2b
open space	←-bádá		lí-dási	lí-uala		CB
				pawakawaka		
open up		kú-nanangula				
		kú-hatambula				
	←-bángud-	kú-bena				
		ku-bangula				
other	←-ngl	-ngi	-ngei	ku-gubákula		CB
outside	←-já	pá-n-za 16/15a / kú-n-za 17/15a		-ngi	[-ingine]	CB
	←-bádá 'open space'		pá-uala	kú-uala		CB
	←-yéne	mw-éne 1/212	mw-éne / [mw-éni]			CB
owner				m-kólo las lisi		CB III [+e-e]
				element of comparison II		

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
pacify	EN ++keng- ++pemb- ++pák- ++kúng- 'tie up'	kú-patanisa kú-kenga / kú-kengaleha kú-pembeha kú-pákha kú-kunga imisigul kú-gándika pack carefully	kú-kenga kú-pákha kú-kaunga kú-gándika pack carefully	ku-patánisa kú-kunga	kupatanisha kupakia	<Swahili or EB EN 2c CB CB CB
paddle	++kápí	[u-kápi] 12(L)	ngáfi / fngáhi		kafi, Cewa g-khafi	CB N13 [+pl ~ hi] N11 [+pl ~ fi] Swahili f is usually normalised as p in N13. The Matengo form could possibly be an adoptive from Swahili or Cewa
paddle		kú-palasa / kú-palasila	ku-palasa	ku-palaza / ku-palázila	kuparaza	<Swahili or EB ?
pain	++cúngu	[u-súngu] 12(L)	ú-únti		uchungu	<Sw [~CB] [+c ~ h]
pain / become painful	EN ++bín-	kú-bina	kú-uina	kú-uma		EN 1
palm of hand	++gánjā	kí-ganza 7/8(l)	kí-gánja lú-koufi / ngófi	chí-gánja	kíganja	CB
parcel	++tumbā	á-tumba 3/4(l)		chí-furúsi ndúndu [m-zigu]	kífurushi mzigo	CB <Swahili or EB EN 2a N12 <Sw [~CB]
pare down	EN ++ndundu ++dígo 'load' ++copp- ++pudud- 'strip off (leaves or skin)'	[n-sigu] 3/4(l) kú-hongola kú-pulula / kú-puluha	ndóndou kú-yéyula ka-súku lí-kwáli	ku-hóngola ku-purula ku-yéyula ka-súku lí-kwáli	kuchonga kasuku kwale	CB ICBI CB CB [EN distribution, but correspondences at CI irregular]
parrot	++guádi / ++kúade / ++kuadi	ka-súku 12(L) ngwáli 9/10(2a)	ngwáli	lí-chúndu		CB
pass	++pít-	kú-peita	ku-peita kú-louta	kú-pita	kupita	CB
patch	++bāmb-	kú-bamba	kú-bamba			CB
patch	ICf ++bāmb-1	kí-bambu 7/8(3) kí-laka 7/8(5)	kí-laka	chí-laka	kiraka	CB Deverbative <Swahili or EB
path / way	++jida / ++jida	in-déita 9/10(L)	ndéila	njifa / [m-zila]ka	nja	CB N12 [+j ~ j]
pay	++díp-	kú-leipa	kú-leipa		kulipa	CB
pay tribute				kú-bonga		
oakymnt	++dipò	ma-léipu 6(L)	ma-léipu	ma-lipo / ma-lipu	malipo	CB V2
peg	EN ++panda	kí-panda 7/8(3)	kí-panda	chí-panda	Shona chí-panda 'hook'	EN 1
peg out				ku-kogómela		
pepper		lw-anákrabóli II				

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
	EN +-jobola	pilipili 9/10121	sóbora	sóbola pilipili	pilipili	EN 2a <Sw (Persian or Hindi)
penalty		asábu 9/10121	azábu		adhabu	<Sw (Arabic)
penis	+bódó			lí-bolo		CB
person	+ntú	mú-ndu 1/2121	mú-ndu	mú-ndu / (mú-nu)	mtu	CB N12 [+ntu ~ ndu]
perspiration	EN +-fykí	lí-hougatella 5/6		lí-fukí / lí-nukí		EN 2a See 4.1
pestle	+yíncí (cf +-túang- 'pound')	mw-íhi 3/4121	mw-ísi	m-twángílu		CB
	EN +-túngulí-	kú-toungoula		kú-túngula		CB
pick, fruit, vegetable, etc	EN +-yab-	kú-jaba	kú-yava	kú-yava kú-nonga		EN 2b
				kú-nyámula	(Shona / Cewa -nonga 'pick up')	EN 1
pick up	+tódá-	kú-tola	kú-tola	kú-tola	Nyanja 'ku-tola, ku-toolá	CB
		kú-tondola kú-jukha				
piece	+pándé	kí-pándi 7/8121	kí-pándi	chí-pándi	kipande	CB V2
pierce	+cótud- +túmbud- +cóm- +tóbud-	kú-sutula kú-hotola kú-tumbula kú-homa 'spear'		kú-homa kú-tobola	kuchoma kutoboa	CB CB CB CB
pig	+gúdué	lí-gouloubi 5/611/31	kú-bóvola	lí-gúruoi	nguruwe	CB V2 N11 [+g-g]
kind of pigeon	+kúnda +jibá	ngúnda 9/10121 ín-zéba 9/1011	nyéba	lí-júá / chí-júá / chí-tukú-júá / lí-tukú-júá	nywa	CB CB
pit	+dindí	lí-lendi 5/6111	lí-lénde	lí-lindi	lindi	CB
plait	+duk-	kú-louka	kú-louka	lí-godi		CB
	EN +-pot- 'twine' EN +-tib- 'make rope'	kú-pota kú-tiba	kú-bata	kú-suka kú-bola kú-tioa	kusuka Yao / Nyanja 'pota	N12 <Swahili EN 1 Dahl's Law in N11 and N12 ? EN 7b
plan	+páng-	kú-panga	kú-panga	kú-panga	kipanga	CB
plan	+pánd-	kú-panda	kú-panda	kú-panda	kupanda	CB
plate	EN +-ceneku	saháni 9/10121 lí-heneku 7/8131 SP	saháni	saháni	sahani	<Sw (Arabic) EN 2b
play	EN +-kín-, cf CB +-kín- 'dance'	kú-kina	kú-kina	chí-heneku SP kú-kina		EN 1 EN 1-1
platform	+táda EN +-lyá	kí-tala 7/6131 lí-húka 11151	kí-tala / lí-tala lí-fuka / lí-fuká			CB EN 2c See 4.1

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
lbel pleased	←-cēkid-	kū-hekalela kū-togulela	lū-yanja li-ndānda lū-chanya kū-hekalela kū-furāhiwa	kū-pendēzewa kū-mota	kufurahi kupendēzewa	CB ←Swahili ←Swahili
become plentiful		kū-joloka				
point at	←-mēm- 'become full' ←-dāngid- 'show' EN ←-lac- 'show'	kū-twelella 'become full' kū-langilla / kū-langha kū-laha kū-honguleka	kū-mema	kū-mema kū-langisa kū-lasa	Yao ku lanjila Yao -lasya	CB CB EN 2b Causative Ext
become pointed		kū-honguleka		kū-hdmoka		
poison		sūmu 9/10(4a)	sūmu	sūmu	sumu	←Sw (Arabic)
for drink poison				li-mbanda		
poison	←-cōbe- / ←-cōmek- EN ←-koj- ←-yiggid- 'come / go in'	kū-hosa kū-homa / kū-homeka kū-kosa		kū-hocha kū-homa kū-kocha	Yao -coma Yao -kosa	CB CB EN 2b NB -ch- in N12 CB Causative 'made to go in, insert
polygamy	EN ←-tala	q-tala 3/4(3)	mi-tala	mi-tala		EN I
pool	←-dibā	ki-liba 7/8(4)		chi-lisa li-bwāwa	bwawa	CB ←Swahili
poor		-lāndu				
poor person		pu-kāla 1/2(1)	fukāra	fukāra masikini m-yāhe	fukara maskini 'cripple'	←Sw (Arabic) ←Swahili
porcupine	←-nūgū / ←-nūgū		nūngū / nungūngū			CB
pot	←-bigā / ←-bigā	ki-bēga 7/8(1)	ki-ueiga	chi-uiga		CB
pound	←-puūd- 'thresh' ←-pōnd- ←-puāgud- EN ←-cokol- 'thresh' ←-tuāng-	kū-poula kū-ponda kū-pwagula 'thresh' kū-hokola	kū-poula kū-ponda			CB CB CB CB EN 2b NB -ch- in N12
pour	←-yit- EN ←-jop-	kū-jitila	kū-yila kū-sopa	kū-yila kū-sopa	kutwanga	CB EN 2a
praise	←-dumb-	kū-lumba kū-sipu	kū-lumba	kū-lumba	kusi lu	CB ←Sw (Arabic)
praise		sipa 9/10(5a)	ma lumū		sifa	←Sw (Arabic) Derivative

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc.	Notes
pregnancy	ICf. +-tumb- 'swell' ICf. +-bimb- 'swell'	ki-tumbu 7/8(1)	ndombou mimba If-leme	ndumbu m-gugu	mimba	CB Deverbative. Deverbative of ku-gaga 'to carry' <Sw I-CBI Deverbative See 'stomach'
press (down)	+-kimb- EN +-cipny- / +-cinyat- +-kány-	ku-hindallia ku-timba ku-hinyatila ku-kanyatila 'trample'	ku-sindallia ku-hinya / ku-hinyata	ku-kanyatila ku-doda ku-dodoyola ku-dodomesa ku-hoatila	kushindilia	CB EN 2c CB
prevent	+-djib- 'stop up' +-kán- 'refuse / deny' EN +-bej-	ku-hiba / ku-hibatila ku-kanallia	ku-besa ku-zuifla	ku-besa ku-betalela	kuziba	CB NI2. [+d] ~ s[1] CB EN 2a <Swahili
prod	+-cók- 'poke in'	ku-hokanyola / [ku-sokosa] ku-kosa ku-hosa Note Extension: Vowel in Matengo IN 13)	ku-hokanyola	ku-hokanyola / ku-honyola	kuzola	CB NI3 [+c ~ s]
promise	+-dag-	ku-lagila / ku-lagana ahadi 9/10(1)	ahadi	ku-lagana	ahadi	CB
promise	+-king-	ku-kinga	ku-kinga	ku-kinga	kukinga	CB CB
protect	+-kag-	ku-kaga 'protect with medicine'	ku-zindika	ku-zindika	kuzindika	<Swahili or EB
provisions	+-pidi	ma-sulupu 6(L)	ma-surufu		masurufu	<Swahili or EB CB
puff-adder		If-pelli 5/6(1)	ndoughouaflu / nduguaflu			
pumpkin	+-yungu	ly-úngu 5/6(2)	ly-úngou	If-meng'a	boga	CB <Swahili ? EN 2c I(CB?)
pull	+-tanga, EN (+-tanga 'cucumber') +-dyt-	If-tanga 5/6(1)	If-tanga / If-tangamanga)	ku-huta ku-kwega	kuvuta	CB
pull out	EN +-tupul-	ku-tupula		ku-tupula	Shoga -tupura, Cowa -tupula	EN 7b

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
	ICf EN *-pit- go out	ku-piha				Causative
pus	*-pjdá	dhila 14(5)	má-fila / [má-hila]	má-fila / [má-hila]		CB N11 & N12 [+pl ~ h]
push	EN *-kang- *-tjnd-	kú-kanga kú-hindailila kú-tutuha	kú-kanga	kú-kanga / kú-kaga		EN 1
put	*-bfilk-	kú-beika	kú-oeika	kú-mufa kú-kinyá		CB
put up a load on another	*-túlk-	kú-tweika		kú-otika kú-twika		CB
put down a load	EN *-gelek-	kú-geleka	kú-géleka	ku-limbikisa		EN 2c
put on fire	*-túúd-	ku-touta		kú-tufa		CB
put near	*-tédlk-	ku-teleka				CB
put down	EN *-ceg- EN *-tam- 'sit'	kú-hegakeha kú-tamika	ku-támika	ku-hegelesa ku-támika / ku-támisa ku-ndúgika ku-helesa		EN 2b EN 1
put across	ICf *-cédid- 'come / go down' *-ping-	kú-heleha kú-peingeika				CB
python	*-cátú	II-hatu 5/6(11/3)	[II-satu]	ku-pingika / ku-pingálila ku-keingeika	chatu	CB N11 [+o ~ h]
quarrel	ICf EN *-koman- 'fight' / CB *-kóm- 'hit'	kú-losana kú-komana	ku-tómana		Yao. -koma 'strike, beat'	EN 1 <CBJ (also under 'fight')
label quick	EN *-yambatik-	[kú-joumbateika]	ku-yambátika			EN 1 [+ya ~ ja]
quickness	EN *-piacu EN *-manyata	kí-pyáhu 7(5) mányata	mányata	chí-pyáhu mányata ku-hárúka		EN 2b EN 1 see 'speed' N12 <Swahili ?
ibel quick		kú-tumbala kú-tama kínunu			kuharakisha	
ibecomel quiet	EN *-tam- kínunu		ku-tama kínunu			EN 2c Cf 'quietness'
quietness / silence	EN *-nyuny	kí-núnu 7(5)	ku-nyámala kí-núnu	kú-guna	kunyamaza	<Swahili ?
rain	*-bydá	(-hula 9(1))	fóra / fóla	fóra / [húla]	mvua	CB N12 [+by ~ lu]
rain	*-tóni- / *-tóny-	ku-kuna kú-tonya		kú-tonya / ku-tónesa		CB
icontinuous rain	EN *-cuela	g-hwéla 3(4)	m-hwéla	m-hwéla		EN 1
rain mist	*-mè	ú-lumi 14(10)		m-péleta		CB N13 also refers to 'dew'

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
	*kúngúgú 'fog'		li-kúngúgou li-mbáúgoulou			CB N11 also refers to 'fog'
heavy rain	EN *+fuku	kí-fuku	[kí-fuku], kífuku	[kí-f-huku]	kífuko	EN 1 or <Swahili ?
rainy season	*+kínd-	kú-hindálla kú-pouta		ku-hindálíla		CB
ram in						
kind of rat	EN *+tulali-	kú-toutalella	kú-tuta ku-toulálella			EN 2c
	*+pukú	lí-kúllí 5/8 14)				CB
	*+cengi	ím-bouku 9/10 III	lí-pouku			see under 'beaver-rat'
	*+beba	[lí-kenzi] 5/6 II/3)	mbéua			CB
			mbéua			< Zulu? (cf. i-gundanel)
razor (blade)	Cf. CB *+jembé 'hoe, axe', *+gembe 'hoe, razor'	lwémbi II/8 14a)	lwémbé	uwembe		EB? Possible skewed connection with CB (the meaning 'razor' is found in Lunda and Bemba)
read	*+póm-	[kú-soma, *+pl-hy]	[kú-soma, *+pl-fy]	kusoma		< Swahili
rear / rattler	EN *+dim-	kú-ima		kú-díma		EN 2b
rear (back)	*+nyúma	kú-nyuma 17+10	kú-nyuma			CB
receive	EN *+yup-	kú-joupa	kú-youpa	mú-mbele		EN 1
	*+pok- / *+pókíd-			kú-yupa	kupokea	CB
	*+tód- 'take'	kú-tola 'take'	kú-tola	ku-pókela		
	EN *+kelet-	kú-keleta	ku-kélela	ku-nandikila		CB
become red						EN 2c See 'red'
red (AU, I)	EN *+kele	-kéli	-kéle	ku-dungupala		Denominative, see 'red'
red colour	EN *+kele			-dúgu		EN 2c
red soil	EN *+kele	u-kéli 141)	u-kéle			EN 2c
red soil	EN *+kunya	kí-kounza 713)		chí-kunya		EN 2b
red (em)	EN *+gombol-	kú-gombola		ku-gómbola	kugombaa	EB
	EN *+kómbol-	kú-kómbola		ku-kómbola	kukombaa	EB
reed	*+tété	lí-tete 5/6 II/3)	lí-dete	lí-dete	tete	CB Dahl's Law in N11 and N12 ?
refuse	*+káán-	kú-kana				CB
	EN *+bel-		kú-bela	kú-bela / ku-belálela		EN 2a Note that N12 ku-belálela means 'refuse to give / hold back'
refuse to give	*+yím- / *+nyím-	kú-jima		kú-nyima	kunyima	CB
				ku-belálela		see 'refuse' above
relation	*+dóngó 'kinship'	ń-dongu 1/211)	kú-besa			CB N11 [+o ~ o]
			[ń-lungu]	ń-longo		
relation / clan	EN *+kolo	lu-kólo 1115)		ń-bena		
remain	*+tigad-	kú-higala / ku-higila	ku-sigala	lu-kolo	ukoo	EB
				ku-sigila		CB NB Ext Vowel in both N11 and N12 Ext Vowel in N12 is extraneous, presumably loaned from N13

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
resemble	+-pján-	kú-hwanana / kú-hwaningana / [kú-pwanana]	kú-hwaningana	kú-hwanana	kufanana	CB [+pya ~ hwa]
remember	+-kimbuk-	kú-koubouka / kú-kouboukella		kú-kimbuka	kukumbuka	CB
remove	+-búok- 'go away'	kú-bouha	kú-woua	kú-woua		CB causative
rest	+-púumud-	kú-poumulela	kú-poumulela	kú-pumúlla		CB
revive	+-djúk-	kú-hyuka kú-pupuha [religious]	kú-syuka / [kú-hyuka]	kú-fúla kú-kirirwuki kang'i / kú-kilawuki kang'i	kufuua	CB N11 [d] ~ si] <Swahili or EB
rib	+-bády	lú-bahu II/10/13/11	lú-uafu	[lú-uahu]	ubavu	CB N12 [+dy ~ fu]
ring	+-pété	péti 9/10/21	péte	[péti]	pete	CB N11 [+e ~ e]
become ripe	+-kómad- +-gýnd-	kú-beligwa kú-komala		[kú-hunda]		CB CB N11 & N12. [+gy ~ fu] Note also osculant starred forms +-bynd- and dynd-. kú-hunda occurs in N13 but with the meaning 'rot / grow mould'.
ripen artificially	+-bynd- +-gýnd-	[kú-bundika / kú-bundakila] kú-hunda 'rot'	kú-funda / kú-fundisa	kú-fundika / [kú-hundika]	kuvunda 'grow mould' / kuvundika	CB N13 [+by ~ nu]
rise up	+-yímuk- +-kúed- +-túp- 'swell'	kú-jimuka kú-kwela kú-tupa	kú-yimuka kú-kwela kú-tupa	kú-yimuka kú-kwela kú-tupa	Yao -tupa 'be too many / much'	CB CB CB
river	+-yúji]	l-óusi III/21	l-óusi ǵ-kemba ǵ-kouka	m-fúleni	Nyanja mfuenu	CB
roar	+-dým-	[kú-suma] kú-buluma	kú-wunguruma kú-buruma	kú-guruma kú-buruma kú-burúmila kú-hywámila kú-yocha	kuvuma 'blow of wind' kunguruma	CB [+dy ~ hu] Phonaesthetic gloss ? Phonaesthetic item ? Phonaesthetic item ?
roast / fry	+-yókí- +-tým- +-kádang-	[kú-josa] kú-humbika kú-kalanga				CB [+ki ~ hi] CB
rock	+-búè 'stone' EN +-tala	l-í-bu / l-ma-bu 5/6/11	kú-nyanya	kú-bánika		CB
			lú-tala SP	lú-talahu SP		EN 2a Special rock with a wide flat top used for washing clothes, drying foodstuff, etc
			lú-ganga	mwamba	mwamba	<Swahili EN 2a
room	EN +-ganga +-yumbá	s-úmba 7/8/1a)	ch-úmba	ch-úmba	chumba	CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
root	+-yúj	ǵ-keiga 3/4(13)	ǵ-keiga / ǵ-keiya	ǵ-kaga [ǵ-zizi]	Yao miga mizi	No *form constructable <Sw I-CB> Reduplicated in Swahili N12 [+d] ~ si]
become rotten in akel round	+-bód- +-búduŋ-	kú-bola kú-buŋga kú-hinga	kú-wola	kú-wola		CB CB
rub	EN +-piec- +-cǵng-	kú-sugulha kú-pyeha kú-hinga		kú-sugula kú-pyeha	kusugua	<Swahili or EB? EN 2b CB
rub off / erase	+-kǵjǵt-	[kú-puta]	kú-futa	kú-futa	kufuta	CB [+py ~ h] N13 <Swahili? Sw f is usually normalised as p in Matengo. It is also possible that Matengo has adopted this form from Swahili via Manda or Ngoni
rub fire	EN +-cungul-	kú-hungula		kú-hungula		EN 2b
rub strong	+-pékic-	[kú-pékesa]	[kú-péketha]	[kú-pékesa]	kupekecha	CB N11-13 [+c ~ h] <Swahili
rule over	EN +-pot-	kú-pota	kú-bota	kú-bota	kutawala	EN 1 Dahl's Law in N11 and N12 ? <Swahili or EB CB
	+-dámud- 'settle dispute	kú-tawala	kú-tawala	kú-tawala		
rumble	EN +-bylum-	kú-hamulisa	kú-buruma	kú-buruma / kú-burumila	kuamuru / kuamrisha	<Swahili EN 1 Phonaesthetic item?
run	+-bútuk- +-tǵid-	kú-butoka kú-tilla		kú-guruma kú-lunduma	kuvuma 'blow of wind'	CB [+dy ~ hu] Phonaesthetic element ? Phonaesthetic element ? CB CB
running off	+-kimbid-	f-mbeilu 8 or 10 11)	ku-kémbella	kú-tila kú-jumba kú-timbuka	Yao ku-tila 'quit, run away'	CB
rub off	+-púkut-	kú-pukuta / kú-pukusa kú-puluha		ma-jucani	kukimbira	CB
saliva / spit	+-tá	l-má-ta 6(1)	má-ta	má-ta	Yao mala	CB Sw mate ~ *té
salt	EN +-tacu	ma-kólogu 5/6 lú-tahu 11(1)		ma-kórolo lú-tahu	Yao lu-tau	No reconstruction possible EN 2b CB
same / sell	+-yinyú	mw-inyu 3(1a)	-ène			CB
send	+-yéne +-cǵngà	ǵ-Fanga 3(1) / [ǵ-sǵngà] 3/4(1)	ǵ-sǵngà / m-hǵngà		mchanga	CB N13 [+c ~ h]
become satiated	EN +-typ- / +-typil-	kú-tupila	ku-túpila	ǵ-sáoti / ma-sáoti ku-túpila / kú-tupa ku-suta		EN 1

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
say	*-yũkut-	ku-pwaga	ku-jowa	ku-jowa ku-kohoha / ku-kohosa ku-guũmũla		J extraneous in reflexes of EN
say farewell	*-dāg-	kũllĩtabuka	ku-lagha	ku-laga	kuaga	-li- = reflexive affix
scar		li-banga 5/6II	li-tāta		Yao liwānga 'wound'	CB
scatter	EN *-yitĩgana EN *-mij-	ku-jitana ku-jitangana ku-misa	ku-yitĩgana	ku-yitĩgana ku-misa ku-tāaanya / ku-taānisa ku-parāgana ku-chechengana chi-pilihi	Yao ku-misa kutawanya	EN I Note Discrepant Extension Vowel in N13 EN 2b N12 < Swahili EN 2b EN 2b NB -ch- in N12
scorpion	EN *-palagan- EN *-jejengan- EN *-pilihi	ku-palagana ku-sesengana ki-péllĩlii 7/8IS	ki-péllĩlii			EN I Note the anomalous high tone on the initial syllable in the Ngoni form
scrape	*-kókud- 'clear away' *-kōmb- *-kūdud- EN *-kuangul- EN *-yuab- EN *-kuend- EN *-kual-	ku-kokola ku-komba ku-koutoula ku-kwangula ku-jwabatulula ku-kwenda ku-kwala / ku-kwalailila	ku-komba ku-k-wangula	ku-kwanga ku-ywacātula / ku-ywāuula ku-kwenda ku-kwala ku-hwūlula ku-hua	kuziba	CB CB CB EN 1 EN 2b EN 2b EN 2b
screen	*-djb-	ku-hiba / kũhibailila				CB [ɛɛ - h]
search for	*čāk- EN *-lond-	ku-pala [kũ-saka]	ku-londa	ku-londa		EN 2a
season with salt	EN *-jop-	ku-jegeitĩlal mwĩnyu	ku-sopa mwĩnyu	ku-sopa mwĩnyu		EN 2a
see	*-dōd- 'look at'	ku-lola	ku-lola	ku-lola		CB
seed	*-bōn- *-bégú *-béyú *-kāmud-	ku-linga ku-bona im-begu 9/10II im-beju 9/10III ku-kamula ku-janga	ku-uona mbéyu ku-kamula ku-nyaka ku-hemelesa	ku-wi, #3 mbéyu ku-kamula	mbegu	CB CB CB CB
seize	EN *-cemel- 'buy'	ku-hemelesa ku-lombesa				EN 2c Causative Ext
sell	*-gūd- 'buy'			ku-guisaŋyanya 'gulitsa	CB	

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
send						
	+-tüm-	kú-peleka	kú-peleka	kú-peleka	kupeleka	<Swahili or EB
	+-tíndik-	kú-tuma			kutuma	CB
		kú-hindiyila / kú-hindakina			kuindikiza	CB Note Discrepant Extension Vowel in N13
separate	+-dèk-	kú-lekana	kú-lekana	kú-lekana	Nyanja -lekanisa	CB Irecipr. / caus I
	+-gáb-	kú-tenganisa			kutengana	<Swahili
	EN +-nanangul-	kú-gaba / kú-gabana			kugawanya	CB
	EN +-mamandul-	kú-nanangula				EN 2b
		kú-mamandula				EN 2b
set trap	+-tég-	kú-tega	kú-tega	kú-tega	kutega	CB
settle dispute		kú-patanisa	kú-patánisa	kú-patánisa	kupatanisha	<Sw
		kú-kenga / kú-kengaleha				
seven		sába	sába	sába	sába	<Swahili or EB?
sew	+-cón- / +-cón-	[kú-sona]		[kú-shona]	kushona	<Swi-CBI N13 f+c ~ h] N12 *c ~ h or s]
	EN +-tot-	kú-tota	kú-tota		Yao ku-tota, ku-totelela	EN 2c
		kú-minika			Yao ku-minika	
shadow / shade	+-dúdi	kí-húli 7/8(L)		chi-húli	kiwili	CB
	EN +-fuhi	kí-hwili 7/8(S)	kí-fwili, kí-hwili	chi-hwili	Yao ciwili etc	EN I
shake	EN +-bagay-	kú-bagaja	kú-uagaya			EN 2c
	EN +-nyuk-	kú-tetameka			kutetameka	<Swahili Note Discrepant Ext Vowel
	EN +-tendem-	kú-nyuka	kú-tendema	ku-nyuguka		EN 2b
	EN +-kyúnd-	kú-kupunda	kú-kupunda	ku-kupunda		EN 2a
				shákmg		EN I
		kú-tyala 'make / show movement'	kú-déigeida			
	+-dúdim- 'shiver'	kú-lilima			Cf P21/Yaol' -tyal-	
shame / shyness	+-cón]	(-hoqi 8/II)	sóni / hōni	sóni	'dance'	CB
	EN +-camy	li-hāmu 5(L)	li-hāmu		soni	CB
sharpen / become sharp	+-cōngūd-	kú-hongola / kú-hongoleka	kú-hongola / kú-hongoleka / kú-hongoka	ku-hóngola / ku-hóngoka	kuchonga / kuchongoka	EN 2c
	EN +-ciui-	kú-hyola / kú-hyoleleka		ku-hyúlika		CB
	EN +-tem-	kú-tema		kú-tema		EN 2b
	+-nòd-		kú-nola	ku-nyr'g'p'ka	kunoa	CB
shave	+-mòd-	kú-moga		kú-nola		CB
	EN +-ket-		kú-mogha	kú-keta		EN 2a
sheep	EN +-mbetele	li-gōhi 5/6(L)	li-mbetele	li-mbetele		
		li-mbetelela: 5/6/II				EN I Presumably phonasthetic N13 -la backformed?
		li-kondálal 5/6/II/3)				<?
shelter (from rain or sun)	+-yúb-	kú-joubela		ku yúola / kú-yuola 'hide'		CB

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
shelter	ICf +-dindid- 'wait / watch over'		ki-lelindu / ki-lelndhlu			CB, Deverbative
shine	+-bād- +-mūdik-	kū-bāla kū-mūlika	kū-gara	kū-gala / ku-galisa ku-gāsima	ku-mūlika kugaa	CB CB <Swahili or EB?
shield	EN +-kopa +-gābō	ki-kopa 7/8/11	[ngau]	chi-kopa	Yao, Nyanja cikopa ngao	EN 2b <Sw I-CBI N11 [+bo - bo]
shin			ṛī-shati			
short	+-yipi +-kūpi	-ipi	-fupi / [-hupi]	[-hupi]	-fupi	CB CB N11 & N12 [+ky-fu]
shortness	+-yipi +-kūpi	-ū-yipi 11/13	ū-fupi / [ū-hupi]	[ū-hupi]	ufupi	CB CB N11 & N12 [+ky - fu]
become short	ICf +-yipi 'short' ICf +-kūpi 'short'	kū-yipatila	ku-fūpika / [ku-hupika]	[ku-hūpika]		CB Denom CB N11 & N12 [+ky - fu]
shoulder	+-bēgā	11-bega 5/6/11/13	11-aega	11-bega	bega	CB
short	+-yam- EN +-ywang-	kū-jcma / kū-jamalila kū-ywanga	kū-ywanga kū-swāmila	kū-ywanga kū-hwama		CB EN 1 No +form constructable
show	+-dāngid- EN +-lak +caus	kū-lāngiha kū-laha	kū-lasa	ku-lāngisa kū-lasa ku-dūngisa	Yao ku-lanyila Yao ku-lasya	CB EN 1 Causative
show teeth	+-kēn-	kū-kena	kū-kena	ku-kēnyula kū-lasā minu		CB Cf EN +-lac-, see 'show' above
shut	+-yigad- EN +-dind- EN +-pugik-	kū-jigala / kū-jigila kū-pougela kū-punga kū-hunika	kū-deinda	kū-dinda ku-pūgika		CB NB Ext Vowel EN 2a EN 2b <Swahili
- 'shut together two flat surfaces'						
shut eyes	EN +-jiiji-	[kū-hihila / kū-hihala]	ku-sisira	ku-sisira ku-gūbika imihul		EN 1 N13 [EN +s - s], also Divergent Ext
side of body	+-bādū +-cānā back / backbone	kū-titila lū-bahu 11/10/13/11	lū-uafu mu-hana	lū-uahu	ubavu	CB I13 NC 10 im-bahu CB
sift / sieve	+-cēng- EN +-ceb-	kū-hengula kū-heba	[kū-heba] kū-sefa	kū-heba ku-chēkecha	kuchekecha	CB EN 1 <English 'sieve' ? N12<Swahili? Or possible but remote connection with +-cēng- since some South African languages have +ng -- k
sign		alāma 9/10/11	alāma	alāma	alāma	<Sw I-Arabici
signature		sahihī 9/10/11	sahihī	sahihī	sahihī	<Sw I-Arabici

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
(become) silent		kú-tumbala kú-tama kinunu kú-tama nú	kú-tama kinunu	kú-tama nú		ideophonic nú 'silent' ideophonic nú 'silent'
sing	+-yimb-	kú-jeimba	kú-yeimba	kú-yimba	kumba	CB
singe	+-bábud- ICf +-yók- 'burn / roast'	kú-babula	ku-uawula	kú-yocha		CB
				ku-tinisa ku-hywaaula		CB
sink		kú-hobela		ku-dumbukila		CB Ext Vw in N11
sister	+-yibid- +-dumbú	kú-jibila ñ-dumbu 1/211	ku-yofila / ku-yoala ndóumbu	dáda		CB
sister-in-law	+-dámú	ñ-dámu 1/215 seméji	ñ-damu	ñ-lamu shemeji	dáda	<Sw (Persian)
sit	EN +-tam-	kú-tama	kú-tama	kú-tama	shemeji	CB <Swahili or EB
six		sita	sita	sita	Yao ku-tama 'sit, dwell'	EN 1
skin	+-góbí	[ngosi] 9/1012 lú-seimba 1113		sita	sita	<Swahili or EB
	EN +-kumba		li-kumba	chi-kumba li-kaua	[ngozi]	<sw [CBI N13 [+b] - m] Sw [b] - w]
(become) slack	+-dègid-	kú-legaleka	ku-légela	ku-légela	kulegea	CB, Divergent Extension Vowel in N13
slackness	EN +-ciel-	kú-hyela		ku-lendémuka ku-hyeluka		EN 2b
slander	EN +-cielu	kí-hyélu 7151		chi-hyelu		EN 2b Deverbative (see 'become slack')
slap	+-gám- 'speak'	kú-gamba				CB
slap	+-kódpj	[li-kópi] 5/6161	li-kófi	li-kófi	kofi	CB N13 [+p] - hi]
slap	ICf EN +-tob- 'beat'	kú-hyatula li-kópi	kú-toa likófi	kú-toa likófi		EN 2b
slave			ñ-uanda	ñ-sutu	mtumwa	<Swahili
sleep	+-gón- EN +-titi- +-tígjid- 'be sleepy'	ñ-túmwa kú-gonela kú-titila	kú-gona / ku-gonálela	kú-gona / ku-gonálela ku-titila ku-singila	Yao ku-titila kusingila	CB EN 2b CB
sleep in	ICf +-gón- 'sleep'	lú-gonu / (-gonu 11/1011)	lú-gono	lú-gono		CB Deverbative
slip	+-céd- +-tjedid- +-tjed-	kú-selela, kú-tyelambuka, kú-nyelambuka	ku-tyelela	ku-tyelela, ku-tyelémuka	ku-teleza	[CB] Variability N13 Ext Vow=1
slipperiness		lú-nyelambu 11, ñ-nyelambu 12	u-tyelelu	u-tyelembusi / chi-tyelébusi / chi-tyelési		Cf 'slip'

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
small	+-kééké	-soku / -sokopi -siki / -sikipi =keki	-choko	-dêbe		N11 ch extraneous CB
smallness	+-kééké	ú-soku 11/15 ú-keki 12/11		ú-debe		ICI, ADJ EN +-sokol CB
become! small	+-kéép-	kú-kepa				
smart / itch		kú-ayanya				
smell	+-dýmá	lu-humba 11/11			vumba 'bad smell'	CB
smell	+-nyók-	kú-nunga / kú-nungila	kú-nunga	kú-nunga / kú-nungila		CB
	+-nyók-	kú-nuha		kú-nuha	kunuka / kunusa	CB
smoke	+-yók	11-hyohi 5/11	ly-ôsi	[ly-ôhi]	moshu	CB N12 [k] - si
smoke (barrel)	EN +-bem-	kú-hupa	kú-bema	kú-bema (thána)		EN 2a Or it could also be related to CB +-pém- breathe
imagine! smooth and round	+-kúding-	kú-kulunga				CB
11 nd of! snail	7EB +-konokono	fi-konokono 5/6	kú-ma/ya	11-konokono / 11-kono	konokono	EB
snare	+-yóká	11-joka 5/6/11/31	11-yoka	11-yoka	nyoka	CB
snare	+-búnj-	kú-hekatelika kú-sekula kú-hunza				CP
snore	EN +-nyopol-	kú-nyopola				EN 2b
soak	+-kódum- 'growl'	kú-koloma	ku-karoma	ku-karoma	ku-karoma	CB
	EN +-tumbik-	kú-suha	ku-tumbika	ku-tumbika	Nyanja -tumbika	EN 1
	+-dobik-	kú-lobeka				CB
		kú-tobela 'dip in gravy'			ML2 (Bemba) -tobela	
become! soaked	EN +-tepatel-	kú-tepatela				EN 2b Note Divergent Extension Vowels
become soft! after soaking	+-yódub-	kú-jolobana	ku-yolobana	ku-yolobana		CB
snail / earth	[-*- gýmbi 'dust']	11-k. ndu 5/6/11 [lu-hómbi] 11/6/11	11-doupi / lu-doupi			
sole of foot	+-tākā			lu-daka		CB Dahl's Law ?
song	+-yāyō	11-āju 11/10/21	11-āju	11-āju	wayo / uwayo	CB N11 Plural nyāyu or nyāyu
	+-yimbō	11-jembu / 11-imbū 11/10/21	[11-émbu]		wimbo	CB N11 [+o -o]

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
sore	←-dondā	kí-londa 7/8(1)	kí-londa	chi-londa	kidonda	CB
soot	EN ←-lali	kí-lali 7/8(1)	kí-lali li-sisira / ma-sisira			EN 2c
lgol sour	←-dud- 'become bitter'	kú-loula		kú-lula		CB
	←-bab- 'become bitter'	kú-baba	kú-uaba	[ku-cháchuka] ku-chúchuta	kuchacha	CB
	←-cac-			ku-lóngela	kuongea	N12<Sw [-CB] [+c -h]
speak	←-dóng-	kú-longela				CB
	←-dánd- 'chat'	kú-pwaga kú-kolabeka kú-landa				CB
spark	EN ←-job- 'say, tell, speak,		kú-joua	kú-joua	ML2[Bemba] -landa 'speak' e.g. a specific language	EN 2a
spear	←-cécé	g-kóha 3/4(1)	góha / mí-goha	[li-chéche]	cheche	N12<Sw [-CB] [+c -h]
speed	EN ←-koca	im-beilu 9(1)	mányata	mányata		EN 1
	←-bidó	mányata	haráka	chí-pyahu	haraka	CB
	EN ←-manyata			ku-yumbátika / [ku-yambátika]		EN 1 (Noun or Adv.) NIKSwahili
	EN ←-piacu	kí-pyáhu 7(5)		ku-pyáhu		EN 2b
move with speed	EN ←-yumbatik-	kú-joumbateika		ku-pyáhu		EN 2b (EN → u - u)
spider	EN ←-tatambuci	lu-tatámbuhi 11/8	lu-tatámbuhi / [lu-tatámbusi]	lu-tatámbuhi		EN 1 [+c -h]
		kí-húhi 7/8(1) 'spider's web / bird's nest'			mzimu	<Sw [-CB] No → form constructable 7N11 < Swahili
spirit	←-dímú	[ñ-símú] 3/4(1) kí-búta 7/8(1)	rôho	chi-húta	roho	CB
	←-úngú 'God'			chi-ñ-lúngu		EN 1 Variation of n and ny unexplained
spit	EN ←-fym-	kú-huna	kú-hunya / [kú-lunya]	kú-hunya	Yao ku-suna	CB N12 [+d -l or r]
split	←-b-dud- / ←-báduk- EN ←-jekan-, cf CB ←-dek- 'leave'	kú-balula / kú-baluka kú-lekana	ku uarura / ku-uaruka	[ku bay- g 's] ku-lékana	Nyanja ku-lekanitsa	EN 2b (C/E)
	←-bánd-	kú-bandula kú-tengana kú-balandula			kutengana	CB <Swahili
	EN ←-yuendul-	kú-jwendula		ku-chalándula		EN 2b
	EN ←-papul-	kú-papula		ku-pápula	Yao -papula 'tear'	EN 2b
		kú-halabana	ku-harábisa	ku-harábisa	ku-haribu	<Sw [Arabic]
spoil	←-démad- 'become injured'			ku-lémasa		CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
spoon	←-yikō 'ladle'	ki-jiku 7/8(L)	[ki-jiku] supōni lū-kolombi	m-bāndiliu	kijiko	CB N11 [+y ~ y, *o ~ o] N11 < Swahili ? <English 'spoon'
spot		lu-pūndi 11/14(L) 'ladle' / m-pūndi 3/4(L) 'ladle'				
		li-bāka 5/6(5/5)			baka	<Swahili
sprawl	←-tāmbadad-	alāma 9/10(L)	li-tāta alāma	alāma li-dāwa	alāma doa	<Sw [Arabic] <Swahili
spread	←-tāmbadad- ←-tānd- ←-dānd- ←-tāmb- EN ←-yanj- ←-yād- ←-yānik- 'spread to dry'	kū-tāmbatika kū-landagana kū-henea kū-tānda / kū-tandika kū-landagana kū-janzaha kū-janika kū-janika	ku-yéneta / ku-yénesa kū-tānda / ku-tāndasa kū-tāndala kū-tāmbuka kū-yānjasa kū-yala kū-yānika	Cf Yao ku-tandagala kuenea kutandaza	CB Variability? <Sw CB	
spring (of water)	←-cjmā / ←-tjmā 'well, pool'	semusēmu 9/10(L) [ki-sma] 7/8(L)	chemchemu	chemchemu	kusambaza chemchem kisima	<Swahili <Swahili or EB <Sw [Arabic] [+c ~ h, +tj ~ hi]
sprinkle	EN ←-mij-	kū-misa	[kū-micha / kū-mija]	kū-misa / [kū-micha] ku-nyunyisa / ku-nyunyisila	Yao ku-misa kunyunyiza	EN 1 N11 & N12 [EN *s ~ s] <Swahili
sprout	←-mēd-	kū-mela	kū-mela	kū-tuka	kumea	CB
squeeze	←-pñj- 7EB ←-mny-	kū-hinya kū-minya kū-tonya	kū-finya / [kū-hinya] kū-minya	kū-finya kū-tonya	kufinya kuminya Yao -tonya 'poke'	CB N11 [+p] ~ [t] EB ? Discrepant vowels: no reconstruction
kind of squirrel	←-ndindi	ki-ndéindi 7/8(L)	ka-ngwicheha / nguchiro	chi-ndindi	nguchiro	EN 2b <Swahili ?
stab	←-cōm-	kū-homa	kū-homa	chf-kuol kū-homa	kuchoma	CB
stalk				kū-chaža		
stalk				ku-nyémuka		
stand	←-yim- / ←-ymidid-	li-pēhi 5/6(L) ŋ-kota 3/4(L)	lū-tonyo kū-yeima	kū-yima		CB
star	←-tōndūā / ←-tōndūē	kū-jeima / kū-jeimalela 'oversee'				
		lū-tondu / ndōndu 11/10(5/5)	[lu-tōndo]			

CE N13 NB Final Compound Vowel (see also
stone and 'burnt grass' 1311: Unrelatable
Final Vowel)

CE N13 NB Final Compound Vowel Iscc also
'stone' and 'burnt grass' i tili; Unreliable
Final Vowel

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
steal	←-yib-	kú-jiba	kú-yioa	kú-yioa kú-hija	kuiba	CB
stealer / thief	←-yibj ←-yand-	mw-ihl / b-ihl 11/2111 [kú-wanza] kú-tumbula kú-longulela kú-situa / kú-situsa	he / ijei / oo-h-ijei	m-hiji [kú-wanza]	mwizi / mwizi kuanza	CB J extraneous in N11/12 <Sw I-CB N13 [←-yand- ~ -jand-] N11 [←-yand- ~ -yand-]
startle				ku-situsa / ku-situla ku-kenyemuka	kushua / shtusha	<Swahili or EB
starve		kú-gaha		kú-dula kú-tamá njala kú-hwéla-njala		
stick		lú-téla / ndéla 11/1015/5a1 lú-ndonga / ndonga ki-bonga 7/8131	ndonga ki-bonga	chi-bonga li-gongo m-lati mbagalu	Yao citela, ndela, katela	CB
heavy! stick / cudgel	←-tógá EN ←-bonga	lú-mbagalilal / mbagalilal lú-nwágálati / nwágálati 11/10			gongo	EN 1 <Swahili
!small thin! stick	EN ←-mbagalu	kú-mamatika / kú-mamatika kú-mata 'daub'	kú-nata / ku-natula	ku-natula / ku-ggana / ku-gamátula / ku-gamátula kú-napa	kunata	EN 2b N13 This form refers to sticks used for thatching houses
stick to				lú-swatu		
stung	←-dúm- 'bite' ←-báb- 'sting, smart,itch'	kú-luma kú-baba kú-nywila 'of medicine on a wound'	kú-luma	ku-natula / ku-ggana / ku-gamátula / ku-gamátula kú-napa		<Swahili Lexical Variability
stomach	←-tumbú 'abdomen' EN ←-leme	lú-tumbu 11/6111	lú-leme	ku-homa lú-tumbu li-leme		CB Sw tumbo ~ CB ←-tumbú EN 2a
stone	←-búé EN ←-ganga	li-li-bu / f-ma-bu 5/6111	li-ganga	li-ganga	[jiwe] Yao li-ganga	CB N13 NE Final Compound Vowel Sw [←b ~ b] EN 2a
stool		ki-télu 7/8111	ki-ti		kiti	<Swahili
stop	←-yim- 'stand'	kú-jeima / kú-jeimeisa	ku-yémeisa	ku-yimisa		CB

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc.	Notes
stop up	←-djb-	kú-kotoka	ku-besa			
stopper	←-djò-	kú-hiba	[ku-ziba]	[ku-hiça / kú-ziba]	kuziba	CB NI1 & NI2 [+dj ~ si]
store up	←-dünd-	ki-hibu 7/8(II)	[ki-zibu]	[chi-zibu]	kizibo	CB NI1 & NI2 [+dj ~ si], [+o ~ o]
	←-bfik-	kú-lunda	ku-aeika	kú-oika		CB
		kú-beika				CB
food store / granary		ki-foku 7/8(II)	ki-bāni	chi-bāna li-tala chi-konjo		NB Discrepant Final Vowel
straddle	←-tāgad-	[kú-tagaja]		ku-tālusa ma-géndelu		CB [+d ~ l]
leg straight in a line		kú-longa				
kind of story			nyanginyāngi			
straighten oneself	←-godük-	kwi-li-golohai	kú-goloka		kujinyosha	CB
strain liquids	←-cüüj-	[kú-suja]		[kú-chuja]	kuchuja	CB
		kú-seseha				
		kú-kamanga				
	EN ←-kygynd-	kú-kuunda	ku-kúgunda	ku-kúgunda	Cf Nyanja -kuntha, -kang antha	EN 1 Cf preceding variability?
strain with exertion						
	EN ←-kangama/-	kú-kasana		ku-tarátara		
	EN ←-iel-	kú-kangamallai		ku-kázana	kukazana	<Swahili EN 2b
	←-kándä	kú-iele		ku-kangámala		EN 2b
strap		g-kánda 3/4(II)	g-kanda	kú-iele	mkanda	CB
stranger	←-gél	g-geni 1/2(II)	g-geni	u-bāpa		CB
stream	EN ←-kuka	g-koulleila 3/4 g-kouka 3/4(II)	g-kouka g-kemba	m-geni		CB
						EN 2c
strength	EN ←-kakala	má-kili 6(II)	má-kakala	chi-pela		
string	←-göyl ←-dj	g-göyl 3/4(II) [g-si] 1/4(II)	g-goyi / kú-goyi	ma-kakala		EN 2a
				[nyäsi] / [wú-zil]	uzi	CB <Sw 1-CBI NI3 [+dj ~ hi] NI2 [+dj ~ si] The -o- in nyäsi is also difficult to relate to CB
strip of	←-püdud-	kú-poulolalof leaves! / ku-puluha lof maize grains from cob				CB
	EN ←-pat-/ ←-patalil-	kú-pata / kú-patalila	kú-pata / kú-patalila	ku-kúpula		EN 2c
		kú-suna	ku-hyawawula	ku-chuna	kuchuna	<Swahili

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
become! strong	←-kód-	kú-kola 'of salt in food'	kú-kola 'of salt in food'			CB On the basis of meaning, these forms could also be generalised as reliable to EN 2c
stump of tree	←-tjkrf	kú-kangamala	kú-koula kú-oya na ma-kákala	ku-kangamala / ku-kangamala	Yao -kangala, -kangamala 'hashten'	EN 2b
stupidity	←-k/jná / ←-t/jná	[kí-hélu] 7/8(L)	lí-béngelu	chí-sina	shina	CB [←j] - (l)
suck	EN ←-cimu ←-pjp- ←-yónk- ←-múgunj-	ú-gága [LIS] u-himu [LIL] kú-hipa kú-jonga kú-mugunya kú-nyugunya	ú-himu kú-sipa kú-yonga kú-mugunya	ú-himu [kú-nyonga]		EN 1 CB CB N12 [←y ~ y] CB Presumably a skewed reflex of CB ←-múgunj-
become! sufficient		kú-tosa / kú-tosella	kú-tosa	ku-tósheka	kutosha	<Swahili or EB
sugar		sukáli: 9(L)	sukári	sukári	sukári	<Sw [KArabic]
sugar cane	EN ←-lungulungu	ñ-dungulungu 3/L	ndungulungu	mú-wa ñ-jók>wani ly-úwa	muwa	EN 2c NB Divergent Extension Vowel in N13 <Swahili?
sun	←-yubá	ly-úba 5(L)	ly-úba	ly-úba		CB Sw jua ~ CB ←-juba
sun-shine	←-yubá 'sun'	ly-úba 5(L)		ly-úba		
surpass	[Cf ←-bád- 'shine'] ←-pít-	kú-peita	kú-peita	kú-shinda	kushinda	CB Deverbative
surprise	EN ←-kenyemul- EN ←-kanga]-	kú-sangalhe	ku-kenyemula	ku-kenyemula ku-kangasa ku-pwitukila	ku-shangaa	CB <Swahili EN 2a EN 2b
swallow	←-mjd-	kú-mila	kú-mila	kú-mila		CB
swallow (bird)				chí-hyetúnyelu		
sway	EN ←-pug-	kú-puga	ku-pepetuka	ku-pugila ku- y gila		EN 2b
swear	EN ←-pepetuk-	kú-pepatuka		ku-lápa	kuapa	EN 2c NB Divergent Extension Vowel in N13
sweep	←-dap- ←-piágid- / ←-piáng- / ←-piáng-	kú-lapa kú-pyagila	ku-pyághila / ku-lyághila	ku-lyághila / ku-lyághila / ku-tyanyia / ku-tyanyia	kufaga	CB CB ? Lexical Variability ?
swell	←-bjmb- ←-túp-	kú-himba kú-tupa	kú-himba / [kú-himba]	[kú-himba] kú-tupa ku-duduolá	kuimba	CB N11& N12 [←bj] - (f) CB

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
swing	EN +-yinjil-	kú-jenzela / kú-jenzeha		ku-yinjila kú-lyusa		EN 2b
swing		ó-zenzélla	ku-tindila	m-yinjilu [m-hilu]		Deverbative, cf above CB N12 [+o -o] <Swahili
taboo	+-gidó	ó-hilu 3/4/11	mw-iku		mwiko	
break! taboo	EN +-tok-	kú-paha		kú-hoka		EN 2a
tail	+-kidá	ó-kella 3/4/13	ó-kella	m-kila m-pyēpye	mikra	CB
take	+-tódó-	kú-tola	kú-tola	kú-tofa	kutoa 'take, remove'	CB
take firewood from fire	EN +-colomol-	kú-holamola		ku-horómora	Yao -somola	EN 2b NB Divergent Extension Vowel in N13
take care of child		kú-tunza			kutunza	<Swahili or EB
take pot, etc., from fire-place	+-yipud-	kú-ijula	ku-yipula			CB
take care of animals		kú-lima				
take off clothes	+-djud-	kú-hula	[kú-hula]		kuwa	CB, N12 N12 : [+dy - fu]
become! taken off	+-djuik-	kú-huka lof flour or dust by wind				CB
take out of container	+-páku-	kú-pakula	ku-pákula / ku-bákula	ku-bákula		CB Dahl's Law in N11 and N12 ?
take from fire	EN +-yokol-	kú-jokola	ku-yókola	ku-yókola	Yao -jokola	EN 1
take care of child	+-dod- 'look at'		ku-yangálla	ku-yangálla ku-lólesa	kuangalla	<Swahili or EB CB
take offence	EN +-cjom-	kú-hyoma	kú-buda kú-hyoma	kú-hyoma / kú-hyómela kú-dada		EN 1
take away	+-búuk- +caus	kú-bouha	kú-hoka	kú-wusa		See under 'remove'
take apart				ku-téngula		EN 2c
take out of water	EN +-lob-	kú-loba 'fish, fish out'	kú-toda			No EN form reconstructable
		ku-houguita	ku-fúwoula / ku-húwoula	ku-húwoula		
	EN +-lopel-	kú-lopollal	ku-lópola	ku-lor, ² la	Yao -lopoya 'fish with hook'	EN 1 N12 causative
tale / story	EN +-fumu	lu-houmu 11/8/31	lu-houmu / lu-fumu			EN 2c
tattoo	ICf +-dém- 'write / engrave')	lu-némbu / némbu 11/1015/5a1		chi-tandawili	kitendawili	<Swahili
teach	+-bud- 'tell'	kú-boula		némbu	Bemba ululimbo / imilimbo, Ma- onde nembu, Sw nembo	CB? This is presumably a derivative of + domb- 'write / engrave', but with Ganda Law applying CB

Gloss	CB / EN	N13 [kú-pundisa]	N11 kú-fundisa	N12 kú-fundisa / [kú-fundisha]	Swahili etc. kufundisha	Notes
tear	EN *--kajul- EN *--papul-	kú-boulela 'inform secretly, whisper to' kú-kasula / kú-kasulana kú-papula kú-motola kú-jwendula kú-babandula	kú-kasula	kú-pápula k-landámula kú-ywéndula kú-totóroka	Yao ku-papula	EN 2c EN 2b EN 2b CB Redupl
tear from the eye	*--códj EN *--coli, cf prec	lí-holi 5/6/11 kú-pwaga kú-landa	lí-holi / [lí-soli]	lí-hosi lí-holi	chozi	CB EN 1 (CB) N11 [EN *c ~ h]
teff						
teff lies	EN *--yob- EN *--kong- EN *--det-	kú-simulilaj kú-konga kú-pwaga isóli	kú-yóbeia kú-konga kú-deta	kú-yosa kú-simulila kú-konga kú-deta kú-josa údesi / kú-josa makeu	kusimula	EN 2a <Swahili EN 1 EN 2a
ten	*--kúmi	kóumi	kóumi	kúmi	kumi	CB
tendon / artery / vein	*--kipá	g-hipa 3/4/11 / [n-sipa] 3/4/11 g-keki 3/4 11	n-sipa	n-sipa / [n-sipa]	mshipa	CB N13: [k] ~ hi] N12 [*k] ~ si]
termite	EN *--kele		lí-kéle	lí-kéle lí-méhe		EN 2a
winged termite	EN *--mbulika	lí-mbulika / mbulika 11/10		mbulika		EN 2b
testicles	EN *--tongo		má-tongo má-zende	má-tongo má-zende		EN 2a z extraneous as reflex of EN
thank	EN *--jengul- *--dumb- *--dá *--bjmb- *--yjbá	kú-sengula kú lumba kú-sukulu -la kú-himba [mw-íha] 3/4/15a lu-hánu 11/12	kú sengusa [+caus] -la mw-íha / [mw-íwa]	kú-sengula # -la lu-minga lu-hánu kú-tunga	kushukuru Yao ku-wimba mwiba Yao ku-tunga	EN 1 Or perhaps connected with the English "thank" ? CB <Swahili CB CB CB N13 [+b ~ b] N11 [*ba ~ oa or wa] EN 2b CB
that / those						
thatch						
thorn						
thorny, sharp grass	EN *--canu					
thread on string	*--túng-	kú-tounga	kú-tounga	kú-tunga		

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
three	*-tātū	-latu	-datu	-datu		CB Dahl's Law in N11 & N12 ?
thresh (corn)	EN *-fiogel- EN *-pepet-	kū-pumunda kū-hyogola kū-pepetā	ku-fyogola ku-wūrura	ku-hyāgola ku-pāpeta		EN 1 EN 2b
threshing floor	*-bugā	lū-hūka 11(5)	lū-uga lū-fuka / [lū-huka]			CB
troat	EN *-fyka					EN 2c N11 (EN *py ~ fu)
throb	EN *-kolomelu		g-kolūmelu	li-kolūmelu		EN 2a
throw	EN *-tuka	kū-toukoulā	kū-unda	kū-unda kū-tuka	kudunda Nyanja ku-tukunya	<Swahili or EB EN 2c
	*-tāg- 'throw away'	kū-lekelā		ku-tāgila		CB
	*-yīr- / *-yītid- pour	kū-jitila	ku-tagha ku-tumāllila	kū-yīta / ku-yītila		CB
thumb		lū-gumba 11/8(1)	lū-kūloulou	[chiddilē-] gumba	gumba	< Swahili or EB ?
tick		s-ōnga / hy-ōnga 7/8(5a)				
tie	EN *-goli		li-gāli	li-gāli		EN 2a
time / period	*-kūng- *-plindī EN *-kumbi	ku-kounga ki-plindī	ku-kounga lū-koumbi	ku-kunga lū-kumbi wakātī	kipindi wakātī	CB CB EN 2a <Swahili or EB
(become) tired	EN *-tond-	ku-soka ku-tonda	ku-tonda	ku-choka ku-tunda	kuchoka	<Swahili or EB EN 1
tobacco	EN *-cona	li-hōna 5/6(4)	li-hōna	ū-golo	Yao sona	EN 2c
to-day	EN *-tulinu *-deedd	lētēlinu lī-lu	lētēlinu lī-lu	lēlu	leo	EN 2c Cf following CB N11/12 V2
tomorrow	EN *-laby	kilābu	kilāwu	[chilāu]		EN 2c N12 <N11
tongue	*-dimj	iy-limi 11(3)	lū-limi	lū-limi	ulimi	CB
tooth	*-yīnō	linu / minu 5/6(2)	linu	linu		CB N11/12 V2 Sw yīno ~ CB *-yīnō
top / attic	*-gudu EN *-nanj EN *-nena	li-gōlu 5/6(1) ku-nānt 17(6) / pa-nānt 16(6)	pa-nānt kū-nena	ku-nānt / ja-nānt kū-nena ma-kwāla		EN 1 EN 2a
torch	*-mūdi	lū-muli 11/8(3)	ki-muli	chi-muli		CB
touch	*-pāpatj- EN *-piec-	kū-papaha kū-gusa kū-pyeha	kū-gusa	ku-pāpasa kū-gusa ku-pyeha	kupapasa kugusa Nyanja ku-pfeula graze	CB NB Compound Final Vowel <Swahili or EB ? EN 2b
			kū-pyafa / kū-pyafasa			

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
tortoise	EN ++-gkongo		li-gkongo	ku-dugika		EN.2a
trample	++-kaany-	ku-kanyatila	ku-kanda		kukanyaga	CB
	EN ++-timb-	ku-timba / ku-timbanyula		ku-timba / ku-timbanyula ku-doda ku-tichula		EN.2b
trap	++-tégó	g-tegu 3/4(13)	g-tegu	g-tegu	ku-tichulana mtego	CB N11/12 V2
travel	++-yënd-	ku-jenda		ku-genda		CB
	++-gënd-					CB
travel / trip	EN ++-yanja	mw-anza 3(1a)	ku-beita			EN.2c
trawl	ICf ++-kaany- 'trample'	ku-kanyata / ku-kanyatila	mw-anja	ku-kanyatila		CB
	++-dibat-		ku-leiwaiteila	ku-lioatila		CB
tree	EN ++-kongy	g-kongu 3/4(13)	g-kongu	{chf-kongu} chf-muti	mti	EN.1 N12 [EN ++-u]
	++-ti			[li-hina / chf-hina]	shina	CB. N12 [k _j or t _j - si]
base of tree trunk	++-kíñá / ++-tíñá	li-hina 5/6(1)	li-sina			CB. N12 [k _j or t _j - si]
try	EN ++-ling-	ku-leinga	ku-leinga		Yao ku-linga	EN.2c
tree-hollow		li-mbúji 5/6(6/5) li-mbúju 5/6(6/5) 'empty inside'				
	EN ++-mbugu	li-mbogu 5/6(1/3)	li-lendel mbógu	moúgu / mbuguwa		EN.1
tribe		li-kabila 5/6(1)	li-kabila	li-kabila	kabila	<Sw [Arabic]
tribute		hishima		ndundu	heshima	<Sw [Arabic]
trouble in:	EN ++-gaci	li-gáhi 5/6(1) ma-táta 6(1)	li-gáhi ma-táta	li-gáhi	matata	EN.1 <Swahili or EB
		ku-laga		ndindani		
- name trouble					Yao ku-laga	
trouble iv f	EN ++-gac-	ku-gaha	ku-gaha	ku-gaha / ku-gáhisa		EN.1
turn	EN ++-ganambuk-	ku-ganambuka	ku-ganambuka	[ku-ganamúka] ku-bilinduka	Yao -ganamula	EN.1 N12 [EN ++mb - mb]
	EN ++-tindil-	ku-tindila	ku-tindila	ku-tindila		EN.1
	++-pinduk-	ku-pindula ku-galabuka				CB
		ku-lyunga ku-sepuka ku-kyellabuka			Yao -galauka, -galambuka	Variability ?
tusk / horn	++-nyáogá	nyánga 9/10(2) li-nyélu 5/6(6/5)			Yao -sepuka Yao ku-ciluka	CB
twin/s	++-pácá	ma-páha 2(1)	li-páha / [li-pasa]	ma-pasa		CB N11 & N12 [+c - h]

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc.	Notes
twinkle	EN *-melomet-	kú-melameta kú-gwetula	kú-meláméta	kú-meléméta	Yao -nyetula ku-gaa	EN 1 Divergent Extension Vowels <Swahili?> CB The cluster -my- is defined in Chapter 1, q v CB NI1 Dahl's Law ?
twist	n[ogg- *-pót-	kú-nnyonga kú-pota	kú-nnyonga kú-bota	kú-nnyonga		
two	*-bidi / *-bidi	-beili	-beilei	-cili	-wili	CB
udder	*-béedé	li-beli 5/6(11/3)	ki-oéle	li-oéle	chuchu	CB <Swahili ?>
ululate	*-dúúút-	kú-luluta	kú-luluta	ku-lúluta		CB
umbilical cord	*-kúúy 'navel' *-túúy 'navel'	g-kuhu 3/4(3) g-Flapóli 3/4(4)	lú-kufu / ngúfu	[chi-tóou]	kitovu	CB NI2<Sw I-CB NI2 [+dy - fu]
umbrella		g-zémbe 1/2(4)			mwavuli	<Sw>
uncle		-beili			mjomba	<Sw>
uncooked / unripe	*-bici / *-bici	-angabéligiwa	-angahúnda	-angápya		CB
untie / unfold	EN *-bopoi-	kú-bopola kú-hatambula [kú-pungula]	ku-wópola	ku-wópola		EN 1
urnate	*-túngud-	kú-tunda ima-kósul	kú-tunda	kú-tunda	kufungua	NI3 <Sw I-CB NI3 [+ty - hu]
urn	*-kójó	ma-kósu 6(4)	[ma-kócho]	[ma-kócho]	mkojo	CB
valley		li-beindi 5/6(1)	li-bóndi	li-bónde	bonde	<Swahili or EB ?>
		ki-mbangu 7/8(5)		li-kémbe		
vegetable	EN *-kolo	li-kólu 5/6(5)	li-kólo	li-kólo		EN 1
village	*-káyá	ku-káya / pa-káya 17 or 16	li-kaya	ku-káya / pa-káya		CB
	[C(*-nyumbá 'house')			kú-nyumba 'at home in the village'		CB
voice	*-ji	[ki-jji] 7/8(4)		[chi-jji]	kiji	<Sw I-CB NE reduplication of CB *-ji>
	EN *-lobi	li-lobi 5/6(11/3)	saúti	li-lobi saúti	sauti	EN 2b <Swahili or EB>
vomit		kú-tapika		kú-deka	kutapika	<Swahili> EN 2a
	EN *-dek- *-dúk-		kú-deka	ku-lúkula		CB
wail	*-did-	kú-leila	kú-leila	kú-leila	kulia	CB
	EN *-pep-	kú-pepa		ku-bembéleza kú-pepa	kubembéleza 'entice'	NI2 < Swahili EN 2b

Gloss	CB / EN	N13	N11	N12	Swahili etc.	Notes
waist	←-būnū	ki-bunu 7/8(3)	ki-wunu	chi-wunu		CB, Sw kiuno — CB ←-būnū
wait	←-dind- / ←-dindid-	kū-leinda / kū-le-ndelea / kū-leindalela	kū-leinda	kū-linda		CB
wake up	←-yimuk- EN ←-yimuk- ←-damuk-	kū-jimuka kū-jumuka kū-lamuka	ku-yumuka	ku-yimuka		CB EN 2c CB
walk	←-yēnd- ←-gēnd	kū-jenda	kū-genda	kū-genda		CB CB
wander about	←-djūng-	[kū-lyunga] kū-tangatanga	ku-tangatanga			CB, f*du — hyu; ←Swahili or EB N12 ← Swahili CB Reduplication N12 ← Swahili CB
war	ICf ←-gēnd- 'walk'					
Imake! war / fight	←-kondo	ngōndu9/10(2)	ngōndo	ku-zulula	kutangatanga	
warm oneself	EN ←-koman-	kū-komana	ku-komana	ku-gendagenda	kuzurura	
become! warm	←-yót-	kū-jota / kū-jotella	kū-yota	ku-lindalinda	kurandaifanda	
wash	←-piup- ←-cāmb-	kū-pyopa kū-samba	kū-pyopa	ngōndo		
	EN ←-jap-	kū-gouloula kū-sapa kū-sapisa	kū-houga kū-wāroula kū-chapa	kū-yota	CB	EN 1 fDr — CB ←-kōm- 'hit with hammer' ? CB
watch	ICf ←-dōd-	kū-lingalilla kū-lolakeha / kū-lolalela / kū-lola		kū-chapa		EN 2c
watch over	EN ←-yangalil- EN ←-yangalil- ←-dind-	kū-pembaha mā-si 6(2) kū-lima	ku-yangalila ku-yangalila ku-yangalila	kū-fua kū-sanya		No ←form constructable EN 1 ←Sw safi 'clean (ADJ)'; ←Arabic N12 ← Swahili
water	ICf ←-pēmū- 'feed' ←-ji ←-yīnj	kū-pembaha mā-si 6(2) ki-liba 7/8(1)	[mā-chi] li-lia	mā-si mā-nji chi-lia		CB CB CB N11 [←-s] — s] CB EN 1 kCB;
water place / well	EN ←-lba, cf CB ←-djā 'pool'		li-hyeiga			
wave		sēla 9/10(4)	ku-fwata / [kū-hwata]		sera	←Sw ←Portuguese for Latin or French? CB N11 [←-dy — fu]
wax	←-djāt-	ku-hwata				Phonesthetic Variability ? CB N12 [←-dy — fu]
wear	←-djād-	kū-hyata kū-hwata		[kū-hwata]		EN 2b
wear out	EN ←-lal-	kū-lala		kū-lala ku-mālila	Yao, Nyanja ku lala	

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
weight	←-d[ɪ] / ←-d[ɪ]b	kú-jomoka [u-sfu]	[u-zitu]	[u-zito]	uzito	<Sw [←CB] N13 [←dɪ - nɪ] N11 & N12 [←dɪ - sɪ]
weed	EN ←-gecel-	kú-kulagalila	ku-gehalala	ku-gehela	kisima	EN 2a
well	←-c[ɪ]má	[kɪ-sima] 7/8(L)	-sima		-zima	<sw [←CB] [←c - h]
well	EN ←-a buina	-sima	sáwa		sawa	<Swahili or EB
			-á bwina	á bwina		<Sw [←Arabic]
			-noú			?EN 2a
[get] wet	EN ←-tepetel-	kú-peima	ku-tepátala	ku-tepátala		EN 1 Divergent Extension Vowels
get well	←-dám-	kú-lama	kú-lama	kú-lama		CB
	←-yimuk- 'rise'	kú-jimuka / [kú-jumuka]		ku-yimuka		CB N11 [←i - ɪ]
what	←-yánj	ky-áni	ky-áni	ch-áni		CB
where	←-kí	kí / kiki	kiki			CB
	EN ←-okɪ, ←-o lcf CB ←-kɪ	kwáko / kwá 17, páko / pá 16, mwáko / mwá 18	kwáki / kwó	kwáki / kwó		EN 2a
which	←-kí	-ko	kouléku	-ki	Bemba, kulikwi	CB
whistling	←-dúdj	lú-louhi 11/8(3)	lu-fyéllu		mluzi	CB
whistle		kú-jeimba lú-louhi	kú-koua lu-fyéllu	lu-kwílu		Phrase, cf 'whistling'
white		-húhu	kú-fyeita	kú-beta lu-kwílu		
whiteness		U-húhu 11(L)	-oarafu	-a fɪsopi		
become white			U-oarafu	ú-sopi		
white / grey hair	EN ←-cylja	kú-húlla	ku-uarara			
whiteman	←-d[ɪ]ngu, ←-júngú etc	lul-húlla 11/10	húlla / [hú-lehe] fulesi	[hú-lyɪs] fulesi	mzungu	EN 1 N12 [EN ← - húlla] No +form constructable
white clay		ú-toupi swákalla g	ú-soungou	ɪ-zúngu		<Sw [Guthrie considers stem of recent origin and +forms spurious]
who	←-yánj	-áni / -á	swákala	chwákala / chókala	chokaa	<Swahili or EB
			-áni / -ya	-yáni / yá		CB

Gloss	CB / EN	N13	N11	N12	Swahili etc	Notes
whole	+--nānī EN +--yoca	nnyāni / nnyā jwāko / jwā, bāko / bā -oha	nāni / nā -oha	-oha	Nyēkyusa -osa, Pangwa -onyha, Sango -ona -zima	EN 1 Related to CB forms, but situation confused <Sw (-CB) CB N11 [+o ~ o] EN 2c EN 2a <Swahili No *form constructable
wife	+--gīnā +--cānē 'principal wife' EN +--canamundu EN +--dala	[-sima] ŋ-hanu 1/2(3) ŋ-hanamundu ŋ-hana nāla / uā-dala hauāra 'concubine' li-hyōmi / li-m-hyōmi ŋ-hyōmi / li-m-hyōmi ŋ-pōungu ŋ-papānīla 5/6 kū-tunda k(-huni) li-papānīla 5/6 kū-peta kū-hungulal kū-peipa 'remove excreta' [kū-puta] lu-hāla 14(4) mā-langu 8(1) ū-habi 14(3) ŋ-habi 1/2(3) kū-nnyala kū-jouma m-bōumba 1/2(4) li-lobi 5/6(1/3) li-hengu 5/6(1) kāsī	[-zima] [m-hānu] ŋ-hana nāla / uā-dala hauāra 'concubine' li-hyōmi / li-m-hyōmi ŋ-pōungu li-papānīla kū-peta kū-beipa kū-futa wāya lū-hala mā-langu ū-habi ŋ-habi / hāu kū-nnyala kū-youma ŋ-bōumba nāla / uā-dala li-lobi li-hengu / li-hengu kāsī	-oha ŋ-dala ŋ-hyōmi / chi-hyōmi / chi-m-hyōmi chi-m-pungu / chi-mbungululu fyōyu kū-fyūyula kū-bungulal māhi li-papānīla li-gwaba kū-peta kū-hungula kū-bipa kū-futa wāya lū-hala ū-habi ŋ-habi kū-nnyala kū-youma ŋ-bōumba nāla / uā-dala li-lobi li-hengu / li-hengu kāsī	hawara 'concubine' Yao wambumba Yao liloŋe, Lingala liloba meno Yao mawangu pazi	EN 1 <Swahili

Gloss	CB / EN	NI3	NI1	NI2	Swahili etc	Notes
become/worn out	+-caakad-	kú-hakallal / [kú-sakallal]	[kú-chákaha]		kuchakaa	CB NI1 [+c ~ h]
	EN +-lal-	kú-husala		kú-lala	Yao, Nyanja kú-lala	EN 2b
	EN +-tond-	kú-tonda	kú-tonda	kú-tonda kú-málíka		EN 1
wound	+-donda 'sore'	k(-londa 7/81)	k(-londa	chí-tonda	[kí-donda]	CB Sw [-do- ~ -o-]
wrap up		kú-bulunga kú-kounga kú-hyeika				
world	EN +-lima	á-deima 311	á-deima dunia	kufungasa á-lima	kufungasha 'pack'	No *form constructable <Swahili
worm	+-bongú		línorómbó lí-wúngou		dunia	EN 1 <Swahili < Arabic
- (bair)	+-yambò	nyambu 9/1012	nyambu	á-nyóo nyambu	nyoo	CB < Swahili
wring	+-kamud- +-njong- 'twist'	kú-kamullal kú-nnyonga	kú-nnyonga kú-houja	kú-huja		CB NI1/12 V2
write	+-demb- +-yándik-	kú-lemba [kú-handika]	kú-lemba kú-yándika	kú-yándika kú-kwékéweta	kuandika	CB CB NI3: [+y ~ j, in Verbs]
xylophone / hand piano	+-dlimbá	lí-limba 5/611 / kí-limba 7/811	lí-limba	lí-limba		CB
yam	EN +-yabu	kí-jabujabu 7/8		chí-yácyau / lí-yácyau	Yao, Nyanja mbarata	EN 2b EN 2c <Portuguese?
	EN +-patata	[mbápata] / mbátata 3/1011 sweet potato kí-láa 7/815 'potato'	mbátata		kíazí	< Swahili ?
yawc	+-yáyud-	kú-jama mwája / mwáju	kú-yáyula	kú-yahámula		CB
yawning	+-yáyú	mw-áju / [mw-ája] 3/115a1	mw-áju	mw-áju	mwáyo	CB NI3: [+u ~ u]
year	+-yáka	mw-áka 3/412	mw-áka	mw-áka	mwaka	CB
yesterday	+-gódó	lísu	góló	góló		CB
you	+-gué +-bé +-bé	gwénga / gwé	wénga wé wé	uc / ueve uc / uáue	wewe	CB CB CB
you	+-mué	mwénga / mwé	mwénga / mwé	nyénye / nyé		CB
		gwénga / gwé				

A P P E N D I X I I :

Material used in connection with Chapter Two

Appendix II

NON-BANTU SWAHILI LOANS IN MATENGO (N13)

(A)	(B)	(C)	(D)
<u>Language of Origin</u>	<u>Swahili</u> <u>(Item & NC)</u>	<u>English Gloss</u>	<u>Matengo</u> <u>(Item, NC & TC)</u>
Arabic	abiria 1/2	passenger	abilîa 1/2, 4/4
Hebrew	ku-abudu	to worship	kú-abudu
Arabic	ada 9/10	custom, manner	âda / âla 10, 2 'fees'
Arabic	adabu 9/10	good manners	adâbu/alâbu 10, 4
Arabic	adhabu 9/10	punishment	asâbu 9/10, 4/4
Arabic	adui 1/2	enemy, foe	adûi/alûi 1/2, 4/4
English	afisa 1/2	officer	ópisa 1/2, 3/3
English	ofisi 9/10	office	ópisi 9/10, 3/3
Arabic	afya 9	good health	âpya 9, 2
Turkish 'sir, master'	afande 1/2	officer in the "National service"	afândi 1/2, 4/4
Arabic	ahadi 9/10	promise	ahâdi 9/10, 4/4
Arabic	ku-ahidi	to promise	kú-ahidi
Arabic (ahiri=delay)	ahirisha	to postpone	kú-ahilisa
Arabic	asante	thank-you	asânti
Arabic	aina 9/10	kind, sort	âina 9/10, 4/4
Arabic	ajabu 9/10	wonderful	ajâbu 9/10, 4/4
Arabic (destiny)	ajali 9/10	accident	ajâli 9/10, 4/4
Arabic	ajili	cause, reason	ajîli
English	Agosti	August	Agôsti
Arabic	ku-ajiri	hire	kú-ajili
Arabic	akiba 9/10	store	akîba 9, 4
Arabic	akida 1/2	chief(spec. sense)	akîda 1/2, 4/4
Arabic	akili 9/10	intellect	akîli 10, 4
Arabic	ala 9/10	sheath	âla 9/10, 2/2

A	B	C	D
Arabic	alama 9/10	mark, sign	alâma 9/10, 4/4
English	alfabeti 9	the alphabet	alúpabeti 9
Arabic	Alhamisi	Thursday	alamîsi
Arabic	ku-amini	trust, believe	kú-amini
Arabic	amani	peace	amâni 9, 4
Hebrew	amina(Religious)	be it so!	amîna (religious)
Arabic	amri 9/10	command, order	ámuli 9/10, 3/3
Arabic	ku-amuru	command	kú-amulisa
	ku-amrisha	command	kú-amulisa
Arabic	anasa 9/10	pleasure, joy	anâsa 9/10, 4/4
Hindustani/ Gujarati	andasi 5/6	pancake	li-andâsi 5/6, 4/4
Arabic	anwani 9/10	address on letter	anwâni 9/10, 4/4
Arabic	au	or	âu
Arabic	ku-arifu	inform	kú-alipu
Arabic	taarifa 9/10	report, news	taalîpa 9/10, 4/4
Arabic	maarifa 6	knowledge	maalîpa 6, 4
Arabic	arusi 9/10	wedding	alûsi 9/10, 4/4
Arabic	ama!	gosh!	âma
Arabic	asili 9/10	origin	asîli 9/10, 4/4
English	Aprili	April	Apulîli
Arabic	ku-asi	rebel, defeat	kú-hasi
Arabic	askari 1/2	soldier	asikâli 1/2, 4/4
Arabic from Greek	askofu 1/2	bishop	asikôpu 1/2, 4/4
Arabic	(ki-)Arabu	Arabic language	ki-halâbu 7, 4
Arabic	arobaini	forty	alubâini
English	atlas 9/10	atlas	(h)atalasi 9/10, 3/3
Arabic	ati	look here!	âti!
Arabic	asusa 9/10	food when beer is drunk	asûsa 9/10, 4/4

A	B	C	D
Arabic	azimio 5/6	declaration/ resolve	5/6, 4/4
English	uanzi 9/10	ounce	húanzi 9/10, 3/3
Arabic	baada	after	baâda
Arabic	badala	substitute, instead of	badâla balâla
Arabic	ku-badili	exchange } change }	{ kú-badili kú-balili
Arabic from Persian	bafta	mohair, kind of cotton cloth	bapûta 9/10, 4/4
Arabic	bahari 9/10	sea, ocean	bahâli 9/10, 4/4
Arabic	baharia 1/2	sailor	bahalîa 1/2, 4/4
Arabic from Turkish	bahasha 9/10	envelope, valice	bahâsa 9/10, 4/4
Persian	bahati 9	luck	bahâti 9, 4
English	baisikeli 9/10	bicycle	básikeli 9/10, 3/3
Arabic	baka 5/6	scar, birth- mark, mark on body	li-bâka 5/6, 1/3
Arabic	bakuli 9/10	large dish	bakûli 9/10, 4/4
Arabic	balaa 9/10, or 5/6	misfortune	balâa 9/10, 4/4
Turkish	balozî 1/2	political consul	balôsi 1/2, 4/4
Persian	bandari 9/10	harbour, port	bandâli 9/10, 4/4
Arabic	bandia	doll, fake	bandîa 9/10, 4/4
Sanskrit or Persian	bangi 9	cocaine	bângi 9, 4
Hindi	bangili 9/10	bangle, brace- let, armlet	bangîli 9/10, 4/4

A	B	C	D
Portuguese	(u)bao 14/10	plank/board	úbao 14/4, 3/3
Arabic	barabara 9/10	broad road, highway	balabâla 9/10, 1/1
Persian	barafu 9	ice	balâpu 9, 4
Arabic	baraka 9	blessing	balâka 9/10, 4/4
	ku-bariki		kú-baliki
Persian	baraza 9/10 5/6	place of public reception, corri- dor, legal court	balâsa 9/10, 4/4
Arabic	barua 9/10	letter	balûa 9/10, 4/4
Turkish	baruti 9	gunpowder	balûti 9, 4
Persian	basi	enough, stop, that will do well then!	bâsi
Persian or Portuguese	bata 5/6	duck	libâta 5/6, 6/5
Arabic/Hindi	bati 5/6 or 10	galvanized iron, corruga- ted iron	libâti 5/6, 4/4
English	ku-batiza ubatizo	baptize baptism	kú-batiza ubatîso 14, 4
Arabic	bei 9/10	price	bêi 9, 2
Arabic	bendera 9/10	flag	bendêla 9/10, 4/4
Arabic	biashara 9/10	trade, trading, business, com- merce	biasâla 9/10, 4/4
Persian also Indian	bibi 1/2	lady, mistress grandmother	bîbi 1/2, 2/2
Arabic	bidhaa 10	trade goods	bisâa 10, 4
Arabic	bidii 9/10	effort, hard work	bilîi 10, 4
Arabic	bila	without	bîla
Arabic	bilauri	crystal, tumb- ler, glass	bilaûli 9/10, 4/4

A	B	C	D
Hindi	bima 9	insurance	bîma 9, 2
Arabic	bikira 1/2	virgin	bikî a 1, 4
	ubikira 1	virginity	ubikî a 14
Arabic	bin	son of	bîni 1/2, 4/4
Arabic	binamu 1/2	daughter of	bînti.
Persian/ Arabic	birika 9/10	kettle	bilîka 9/10, 4/4
Hindi or English	bisibisi 9/10	screw-driver	bisibîsi 9/10, 4/4
Arabic	bizari 9	curry powder, seeds/herbs used as spices	binzâlî 9, 4
Hindu	bohari 9/10	go-down, store	bohâli 9/10, 4/4
English	boi 1/2	house-servant	bôi 1/2 2 2/2
Persian	boma 5/6	fort, defence, rampart, colo- nial governme- nt. offices	libôma 5/5, 4/4
Arabic	bora	better, prefera- bly	bôla
Arabic	bomba 5/6	pump, pipe	libômba 5/6, 4/4 9/10
Arabic/ Portuguese	boriti	pole, plank, girder, beam, joist	libolîti 5/6, 4/4
English	blanketi 5/6	blanket	libûlangeti 5/6
English	buluu/bluu	blue(the colour)	bulûu
English	bunda	parcel, bale	libûnda 5/6, 4/4
Persian (also Arabic, Hindi)	bunduki 9/10 (m)buni 9/10	gun, rifle coffee bean	bundûki 9/10, 4/4 mbûni 10, 2
Arabic	ku-buni	guess, fabri- cate, contrive	kû-buni

A	B	C	D
English	burashi 9/10	brush	bulâsi 9/10, 4/4
Arabic	ku-burudika	enjoy one- self	kú-buludika
	busara 9/10	wisdom, good sense	busâla 10, 4
Persian/Ar.	bustani 9/10	garden	busitâni 9/10, 4/4
Arabic	ku-busu	kiss	kú-busu
	bweni 5/6	dormitory	libwêni 5/6, 4/4
Portuguese	bweta 5/6 9/10 kibweta 7/8	small box	kibwêta 7/8, 4/4
Arabic	bushuti 9/10	kind of cloak, garment	libusûti 5/6, 4/4
Chinese, Persian, Hindi	chai 7/8	tea	sâi 7/8, 2/2
English	chaki 9/10	chalk, putty powder	sâki 9/10, 2/2
Persian, Hindi	chama 7/8	guild, club, association, society	sâma 7/8, 2/2
Hindi	chandalua 7/8	mosquito net, awning, canopy	sandalûa 7/8, 4/4
Persian Hindi	chapa 9/10	seal	ṣāpa 9/10, 5a/5a
Persian	cherehani 9/10	sewing machine	salahâni 9/10, 4/4
Hindi	cheti 7/8	note, chit, certificate, letter	ṣēti 7/8, 5a/5a
Persian	dada 1/2	elder sister	lâla 1/2, 2/2
Arabic/ Persian	daftari 9/10	exercise book, note book, ledger, account book	laputâli 9/10, 4/4

A	B	C	D
Greek/ Arabic	dai 5/6	claim, legal suit	madâi 6,4
Arabic	dakika 9/10	minute	lakîka 9/10, 4/4
English	daktari 1/2	doctor	lakitâli 1/2, 4/4
Arabic	dalili 9/10	sign, signal, token, trace, mark, evidence, indication	lalîli 9/10, 4/4
Arabic	daraja 9/10 or 5/6	bridge	lalâja 9/10
Arabic	darasa	class, classroom	lilalâsa 5/6
Arabic	darubini 9/10	microscope	lalubîni 9/10
Hindustani	deni 5/6	debt	lilêni/lidêni 5/6, 4/4
Arabic	dengu 10	Indian peas	dêngu 10, 2
English	dereva dreva 1/2	driver	lelêpa 1/2, 4/4
English	Desemba 9	December	Desêmba 9, 4
English	deski	desk	lilêsiki 5/6
Persian/ Arabic	desturi 9/10	custom	lesitûli 9/10, 4/4
Arabic	dhahabu 9/10	gold	sahâbu 9/10, 4/4
Arabic	dhaifu	weak, feeble, infirm, power- less	saîpu - ADJ.
	mdhaifu 1/2	weak person	ṇ-saîpu 1/2, 4/4
	udhaifu 14	weakness	û-saîpu 14, 4
Arabic	dhamana 9/10	surety, gu- arantee bail	samâna 9/10, 4/4
Arabic	ku-dhaminia	bail for	kû-samania
Arabic	mdhamini 1/2	surety, trustee	ṇ-samîni 1/2, 4/4
Arabic	dhambi 9/10	sin, crime, offence	sâm̐bi 7/8, 5a/5a

A	B	C	D
Arabic	dhamiri 9/10	conscience	samîli 9/10, 4/4
Arabic	ku-dhani	suspect, guess, be of the opi- nion,.....	kú-sani
	ku-dhania	(-applicative-)	kú-sanía
Arabic	dhiki 9	perplexity, strain, stress, difficulties, trouble	sîki 9 , 2
Arabic	dhoofu	become weak, feeble,..	kú-soopu
Arabic	dhoruba 9	storm	sólûba 9 , 4
Arabic	ku-dhuru	harm, hurt, damage, cause loss of injury	kú-sulu
Persian	dini 9/10	religion	lîni 9/10, 2/2
Persian	dirisha 5/6	window	lindilîsa 5/6
Persian	diwani 1/2	councillor senator	diwâni 1/2, 4/4
Hindi	dobi 1/2	washerman	dôbi 1/2, 2/2
Persian	dodo	round and big	dôdo ADJ.
Arabic	dola 9/10	kingdom, empire	lôla, dôla 9/10, 2/2
Hindi	doti	two similar pieces of cotton cloth	dôti 9/10, 2/2
Arabic	dudu 5/6	insect } insect } small insect }	kilûlu (insect)
	mdudu 1/2		7/8, 4/4
	kidudu 7/8		
Hindi	duka 5/6	shop	lilûka, lidûka 5/6, 4/4
Arabic	dumu	last, remain } longer }	{ kú-lumu kú-dumu
Arabic	dunia 9	world, earth	dunîa/lunîa 9, 4
Arabic	duara 9/10, 5/6	round circle	liluâla 5/6, 4/4

A	B	C	D
Arabic	elimu 9	education, knowledge, learning	elîmu 9, 4
Arabic	elfu	(one)thousand	élupu TC 3
Hindi Arabic	embe 9/10	mango fruit	kiyêmbi 7/8, 4/4a sêmbi 7/8, 4a/4a
Arabic	enjili 9/10	gospel, New Testament	enzîli 9, 4
Arabic	enzi 9	might, power, honour(us.Divine)	ênzi 9, 4a
Arabic	mfadhili 1/2 ufadhili 14	benefactor benefaction	mpwasîli 1/2, 4/4 upwasîli 14, 4
Arabic	faida 9	profit/gain	pwaîda 9, 4
English	fasheni 9	fashion	{ páseni pásheni 9/10, 3/8
Arabic	fukara 1/2 ufukara 14	poor person, beggar poverty destitution beggary	pukâla 1/2, 4/4 upukâla 14, 4
English	Februari	February	Pébuluali
Arabic	tafsiri 9 (kufasiri translate)	translation explanation	tapasîli 9,4
Hindi	fedha 9/10	money	pesa 10, 5a
Arabic	fitina 9/10	antagonism, mischief, discord	pitîna 9,10, 4/4
English	fulana 9/10	undervest	pulâna 9/10, 4/4
Arabic	fununu 9/10	rumour	punûnu 9/10, 4/4
English	futi 9/10	foot(measure)	pûti 9/10, 4/4a

A	B	C	D
Arabic	furaha 7/8 or 5/6	joy, happiness, pleasure	pulâha 9,4
Arabic	kufurahi	to be happy,..	kú-pulahi
Arabic	kufurahia	rejoice at	kú-pulahia
Arabic	kufurahiwa	become overjoyed	kú-pulahiwa
Arabic	(ki)furushi 7/8	bundle, packet, package	kipulûsi 7/8, 4/4
Arabic	futari 9/10	(kind of meal)	putâli, potatoe dish 9,4
Hindi	gari 5/6	cart, car, vehicle	ligâli 5/6, 4/4
English	gazeti 5/6	newspaper	ligasêti 5/6, 4/4
Portuguese	gereza	fort. used as a prison	gelêsa 9/10, 4/4
English (Carbine, cf koroboi)	gobori 9/10	muzzle, loading gun	gobôli 9/10, 4/4
Hindi/ Gujarati	godoro 5/6	mattress/ bolster	ligodôlu 5/6, 4/4
Persian	gololi 9/10	marble, pellet, ball-bearings of cycles, motor-cars	golôli 9/10, 4/4
Arabic	ghafla	suddenly	gâpula
Arabic	ghala 9/10	store	gâla 9/10, 4a/4a
Arabic	gharama 9/10	expense	galâma 9/10, 4/4
"	ku-gharamia	incur expense for something /someone	kú-galami(ha)
Arabic	ghadhabu 9/10	wrath, fury, anger, rage, exasperation,	gasâbu 9/10, 4/4
Arabic	ku-ghadhibika	be furious/angry, become enraged	kú-gasibika

A	B	C	D
Arabic	ghasia 9/10	tumult, noise	gasîa 9/10, 4/4
Arabic	ghorofa 9/10	upper apart- ment	golôpa 9/10, 4/4
Hindi	gundi 9	gum, paste	gûndi 9, 4a
Hindi	gunia 5/6	sack	lîguni(la) 5/6, 1/3
Persian	gurudumu 5/6	wheel/tyre	liguludûmu 5/6, 4/4
Arabic	gwaride 9/10	drill, parade	gwalîdi 9/10, 4/4
Arabic	habari 9/10	news	habâli 9/10, 4/4
Arabic	hadithi 9/10	story/fable	hadîsi, halîsi 9/10, 4/4
Arabic	hafifu	poor in quali- ty, valueless, trifling, insi- gnificant	hapîpu
Arabic	hai	animate, live, alive, living	hâi
Arabic	haidhuru	it doesn't matter, don't bother	haisûlu
Arabic	m-haini 1/2	traitor, betra- yer, deceiver, renegade	ḡ-haîni 1/2, 4/4
Arabic	haja 9	need, desire	hâja 9, 4a
Arabic	ku-hiji	make pilgri- mage	kú-hiji
Arabic	haki 9/10	right, justice	hâki 9/10, 4a/4a
Arabic	(hakiba) akiba 9/10	savings	hakîba 9/10, 4/4
Arabic	hakika 9/10	justification	hakîka 9/10, 4/4
Arabic	hakimu 1/2	judge	hakîmu 1/2, 4/4
Arabic	halafu	afterwards	halâpu
Arabic	halaiki 9	crowd, colle- ction of people	halaîki 9, 4
Arabic	halali	lawful, legal	halâli

A	B	C	D
Arabic	hali 9/10	condition, state	hâli 9/10,
Arabic	halifu	rebel, transgre- ss, oppose, contradict, contravene	-kú-halipu
	mhalifu 1/2	a rebel, tran- sgressor,...	ḡ-halîpu 1/2, 4/4
	uhalifu 14	rebellion, contravention	uhalîpu 14, 4
Arabic	halisi	true, genuine, real, exact, precise, accu- rate	halîsi
Arabic	halmashauri 9/10	committee	halimasâuli 9/10
Arabic	hamu 9	longing, year- ning, anxiety, love, desire,...	hâmu 9, 4a
Arabic	handaki 5/6	ditch, trench, military, hideout	lihandâki 5/6, 4/4
Arabic	hanithi 1/2	sexually impotent	hanîsi 1/2, 4/4
Arabic	haraka 9	haste	halâka 9, 4
Arabic	haramu 9	forbidden act/thing	halâmu 9, 4
Arabic	ku-haribu	destroy, spoil, ruin, demora- lize, damage, injure	kú-halibu kú-halabana
Arabic	haribifu	destructive violent	-halibîpu
Arabic	harisha	(cause to) have looseness of the bowels, diarrhoea	kú-halisa also: kú-halisana
Arabic	harufu 9/10	smell	halûpu 9/10, 4/4
Arabic	harusi 9/10	wedding	halûsi 9/10, 4/4

A	B	C	D
Arabic	hasa	exactly, especi- ally	hâsa
Arabic	hasara 9/10	damage, loss	hasâla 9/10, 4/4
Arabic (castrate)	ku-hasi	defect	kû-hasi (religious)
Arabic	hasira 9/10	anger, wrath, passion	hasîla 9/10, 4/4
Arabic (unti, till)	hata	even	hâta
Arabic	hatari 9/10	danger	hatâli 9/10, 4/4
	ku-hatarisha	endanger	kû-hatalisa
Arabic	hati 9/10	document	hâti 9/10, 4a/4a
Arabic	hatia 9/10	fault, trans- gression, crime, sin, guilt, blame, culpability	hatîa 9/10, 4/4
Arabic	hatua 9/10	step, pace	hatûa 9/10, 4/4
Arabic	hawara 1/2	paramour	hawâla 1/2, 4/4
Arabic	hazina 9/10	treasure de- posit of money, exchequer, pri- vy purse	hasîna 9/10, 4/4
Arabi	hebu	well, please, let me,...	hêbu
Arabic	hekalu 9/10	'church'	hekâlu (religious place of God) 9/10, 4/4
Arabic	hekima 9/10	wisdom	hekîma 9/10, 4/4
Arabic	heko!	Hurray! Well done!	hêko!
Arabic	hema 5/6	tent	lihêma 5/6, 4/4
Arabic (good luck)	heri	better, the best, good luck, happiness, blessedness	hêli

A	B	C	D
Arabic & Swahili (good luck)	kwa heri	good-bye	kwa hêli
Arabic	herufi 9/10	letter of the alphabet	helûpi 9/20, 4/4
Arabic	hesabu 9/10	count, reckon upon, calculate	
Arabic	ku-hesabu	count, reckon upon, calculate	kú-hesabu
Arabic	heshima 9/10	honour, dignity, respect, reverence	hesîma 9/10, 4/4 also: hisîma 9/10, 4/4
Arabic	ku-heshimu	honour, respect	kú-hesimu
Arabic	hewa 9	air	hêwa 9, 4a
Arabic	hiari 9	choice, option, preference, selection, 'deliberately'	hiâli 9, 4
Arabic	ku-hifadhi	preserve, keep, protect, save	kú-hipasi
Arabic	hila 9/10	trick, cunning- ness, plot, craft, deceit, strategem	hîla 9/10, 4a
Arabic	hirizi 9/10	charm, amulet	hilîsi 9/10, 4/4
Arabic	hisa 9	part, share	hîsa 9, 4a
Arabic	ku-hitaji	be in want, need	kú-hitaji
Arabic	hitilafu	difference, blemish, dis- cord, defect	hitilâpu
Arabic	ku-hitimu	finish, be completed	kú-hitimu
Arabic	hodari	brave, active, hardworking, energetic, cou- rageous, effecti- ve	- hodâli -holâli

A	B	C	D
Arabic	hodi!	May I come in!	h ^o uti h ^o di
Arabic	hofu 9	fear	h ^o pu 9, 4a
Persian	hoi	state of helplessness	h ^o i
Arabic	ku-hoji	ask questions, cross-examine	k ^u -hoji
Arabic	homa 9	fever	h ^o ma 9, 4a
English	honi 9/10	claxon, syren, motor-horn,	h ^o ni 9/10, 4a/4a
English	hospitali 9/10	hospital	h ^o sipitali 9/10, 3/3
English	hoteli 9/10	hotel, restaur- rant	h ^o тели 9/10, 3/3
Arabic	hotuba 9/10	speech, oration	h ^o tuba 9/10; 4/4
Arabic	ku-hutubia	make a speech	k ^u -hutubia
Arabic	ku-hubiri	make a speech	k ^u -hubiri
Arabic	hudhuni 9	grief, sorrow	h ^u s ^u ni 9, 4
Arabic	ku-hudhuria	attend meeting	k ^u -husulia
	ma-hudhurio 6	attendance	ma-h ^u sul ⁱ u 6, 4
Arabic	huduma 9/10	(public service)	h ^u d ^u ma 9/10, 4/4
Arabic	ku-hukumu	judge	ku-h ^u kumu
Arabic	hukumu 9/10	judgement	h ^u k ^u mu 9/10, 4/4
Arabic	mahakama 6	place of ind- gement, court	mahak ^a ma 6, 4
Hindi/ Gujarati	hundi 9/10	money order, cheque, draft, bill of exchange	h ^u ndi 9/10, 4a/4a
Arabic	huni	become vagabond turn traitor, leave off, be be lawless, lawless person	h ^u -h ^u ni 1/2, 4/4
Arabic	uhuni 14	lawlessness	uh ^u ni 14, 4

A	B	C	D
Arabic	huru	free	hûlu
Arabic	uhuru 14	freedom	uhûlu 14, 4
Arabic	huruma 9,	pitty, compa- ssion, sympa- thy, mercy	hulûma 9, 4
Arabic (give a share	ku-husu	concern, apply to	kû-husu
Arabic	huzuni 9/10	distress, sorrow, grief, sadness,....	husûni 9/10, 4/4
Hebrew	ibada 9	worship	ibâla, ibâda 9, 4
Arabic	ibara 9	section	ibâla 9,4
Arabic	idadi 9	number	ilâli, idâdi 9, 4
Arabic	idara 9/10	department	idâla 9/10, 4/4
Arabic	idhini 9	permission authorisation to act	isîni 9, 4
Arabic	idi 9	religious feast	îdi 9, 4a
Arabic	Ijumaa	Friday	Ijûma
Arabic	ila	except, unless, but	îla
Arabic	imani 9	faith, trust, credibility, belief	imâni 9,4
Arabic	ku-amini	belive	kû-amini
Arabic	imara 9	strength, solidarity	imâla 9, 4
English	inchi	inch	însi 9/10, 4a/4a
English	kiingereza 7	English langu- age	Kiîngereza 7, 3
English	Mwingereza	English citizen	îngelesa 1/2, 3/3
Arabic	insha	essay, compo- sition	însa 9/10, 4a/4a
Arabic	ishara 9/10	sign, omen, signal(mark)	isâla 9/10, 4/4

A	B	C	D
Arabic	maisha 6	life	maîsa 6, 4
Arabic	Islam u	Mohameda- nian	-îsilamu
Arabic	Mwislamu 1/2	Moslem	î-silamu 1 /2, 3/3
Arabic/ Persian	jahazi 5/6	ship	lijahâsi 5/6, 4/4
Arabic	jadi 9/10	tradition, custom, gene- ology, descent	jâdi 9/10, 4a/4a
English	jaji 1/2	judge	jâji 1/2, 4a/4a
Arabic	jalada 5/6	cover of a book	lijalâda 5/6, 4/4
Arabic	ku-jali	give heed/res- pect/reverence	kû-jali
Arabic	ku-jaliwa	be endowed by God, be gifted by Providence	kû-jaliwa
Arabic	U-jamaa	family-hood relationship, 'socialism'	u-jamâa 14,4
Arabic/ Persian	(jamadari) jemedari 1/2	commanding officer	jemedâli 1/2, 4/4
Persian	jamanda 5/6	big basket	lijamânda 5/6, 4/4
Persian	jambazi 1/2	charlatan rogue	lijambâsi 1/2 or 5/6, 4/4
Arabic	Jamhuri 9/10	Republic	Jamhûri 9/10, 4/4
Arabic (gather, recollect together)	jamii 9/10	type, kind, relation, family	jamîi 9/10, 4/4
English	Januari	January	Jânuali
Arabic	Jaribio 5/6	test	lijalibîu 5/6, 4/4

A	B	C	D
Arabic	jasiri	bold, audacious, risky, daring, venturous, brave	-jasîli
Arabic	mjasiri jasiri 1/2	brave/daring/ve- nturesome person	jasîli 1/2, 4/4
Arabic	ujasiri 14	audacity, ventu- resomeness, bravery	ujasîli 14, 4
Arabic	jasusi 1/2 ujasusi 14	betrayal, spy betrayal, espionage	jasûsi 1/2, 4/4 Nc 14, 4
Arabic	jawabu 5/6	answer	lijawâbu 5/6, 4/4
Arabic	jeneza 5/6	held used at funerals	lijenêsa 5/6, 4/4
Arabic	jeraha 5/6	wound, sore	lijelâha 5/6, 4/4 - kîlonda
Arabic	jeshi 5/6	host, army	lijêsi 5/6, 4/4
Arabic	jeuri	cunning, insu- lting, crafty	-jeûli
Arabic	jeuri 1/2	cunning/crafty person, rufian	ñzeûli 1/2, 4/4
Arabic	ujeuri 14	cunningness, craft	ujeûli 14, 4
Arabic	ku-jibu	answer, respond	kú-jibu
Arabic	jibu 5/6	answer, respo- nse	li-jîbu 5/6, 4/4
Arabic	jibini 9/10	cheese	jibîni 9/10, 4/4
Arabic	ku-jidai	claim falsely, claim without justice	kú-jidai
Arabic	jini 5/6	demon, fairy, spirit, genie	NC 5/6, 4/4
Arabic	jinsi	how to (do)	jînsi

A	B	C	D
English	jiografia	Geography	joglapîa
Arabic	jirani	neighbour(near adjacent, not far)	jilâni
Arabic	ku-jisifu	praise oneself	kú-lisipu
Arabic	ku-jitahidi	make an effort, exert oneself, try hard, strainat	kú-jitahidi
Portuguese	johari 9/10	jewel, germ, precious stone	johâli 9/10, 4/4
Persian/ Arabic/ Turkish	joho 5/6	long loose cloth	lijôho 5/6, 4/4
Hindi	jora 5/6	length of (calico) cloth (ca 30 yards)	jôla 5/6, 2/4
Arabic	jozi	pair, brace, couple	jôsi
Arabic	juhudi 10	effort, exertion, strain, ardour, zeal	juhûdi 10, 4
Arabic (to judge one's self guilty)	jukumu	(self-) responsibility	jukûmu
Arabic	jukwaa 5/6	pulpit, stage	lijukwâa 5/6, 4/4
Arabic	Ijumaa(Jumaa)	Friday	Ijúma (Ijumâa)
English	Juni	June	Jûni
Arabic	juma 5/6 or 9/10	week	lijûma 5/6, 4/4
English	Julai	July	Julâi

A	B	C	D
Arabic	ku-juta	regret, feel loss of, be sorry for, feel remorse for	kú-juta
Arabic	ku-jutia	=do=	kú-jutia
Arabic	juto 5/6	regret, remorse, sorrow for what is past	majûto 6, 4
Arabic	ku-kaba	press tight	kú-kaba
Arabic (a man of high importance)	kabaila 1/2	'capitalist'	kabâila 1a/2a, 4/4
	ukabaila 4	capitalism	ukabâila 14, 4
English	kabari	cupboard, side board	likábati 5/6, 4/4
Arabic (lay hands on)	ku-kabidhi	entrust	kú-kabiṣi
Arabic	kabila 5/6	tribe	likabîla 5/6, 4/4
Arabic	ku-kabili	confront, brave, defy, oppose, face	kú-kabili
Arabic	kabisa	wholly, entirely, completely	kabîsa
Arabic	kabla	before	kabûla kábla
Arabic	kaburi 5/6	grave	likabûli 5/6, 4/4
Hindi	kachumbari 9	pickles, chutney	kasumbâli 12 or 9, 4
Arabic	kadha (wa ka dha)	kasa	
	thus and thus, et cetera, and so on, similarly		
Arabic	kadhalila	similarly, likewise, in like manner	kasalîka

A	B	C	D
English	kadi 9/10	invitation, invitation card	kādi 9/10, 4a/4a
Arabic	ku-kadiria	estimate, guess	kú-kadīlia
Arabic	kadiri	to the extent	kadīli
Arabic	kafiri 1/2	infidel, athe- ist, pagan, un- believer	ḡkapīli 1/2, 4/4
Arabic	ukafiri 14	infidelity, paganism, atheism	ukapīli 14, 4
Sanskrit	ka-furi 12 or 9/10	camphor	kapuli 9/10, 4/4
Arabic	ku-kufuru	blaspheme, revile, aposta- tize, commit sacrilege, re- nounce God)	kú-kupulu
Abyssinian/ Arabic	kahawa 9/10	coffee	kahāwa, kahāgwa 12 or 9/10, 4/4
Arabic	kaidi	obstinate/stu- born	kaīdi
	ukaidi 14	obstinacy, stubbornness	ukaīdi 14, 14
	mkaidi 1/2	obstinacle, stubborn person	ḡ-kaīdi 1/2, 4/4
Persian	kaka 1/2	(elder)brother	kāka 1/2, 4a/4a
Arabic	kakara (esp. kukuru kakara)	struggling, wrestling =do=	kakāla kukulu kakala)
Udru or Persian	kaki 9	kind of cloth	kāki 9, 4a
English	kalamu 9/10	pencil	kalāmu 9/10, 4/4
English	kalenda 9/10	calendar	kalēnda 9/10, 4/4
Arabic	mkalimani 1/2	interpreter	ḡkalimāni 1/2, 4/4

A	B	C	D
Arabic	kamari 9	game of cards chance played for money stakes	kamâli 9, 4
English	kambi 5/6	camp, camping place	likâmbi 5/6, 4/4
English	kampuni 9/10	company	kampûni 9/10, 4/4
Arabic	kamili	complete perfect	kamîli
Arabic	kamusi 9/10	dictionary	kamûsi 9/10, 4/4
Arabic	kaniki 9/10	dark blue calico/cotton	kanîki 9/10, 4/4
Arabic	kanisa 9/10	church	kanîsa 9/10, 4/4
Arabic	kanuni 9/10	law, regula- tion, rule	kanûni 9/10, 4/4
Arabic	kanzu 9/10	long sleeved calico gown	kânzu 9/10, 4a/4a
Greek	karaffu 9	cloves	kalapû(h)u 9, 4
Arabic	karamu 9/10	feast	kalâmu 9/10, 4/4
Hindi/ Gu- jarati/Per- sian	karani 1/2	clerk, Secre- tary, agent, amannensis, supercargo)	kalâni 1/2, 4/4
Portuguese	karata 9/10	playing cards	kalâta 9/10, 4/4
Greek	karatasi 5/6	paper	likalatâsi 5/6, 4/4
Arabic	karibu	hear	kalîbu
Arabic	ku-karibisha	invite as gue- st, welcome, entertain	
Arabic	karibu	generous, open-handed liberal	kalîmu
Arabic	ku-kariri	(repeat) learn by heart	ku-kalili

A	B	C	D
Arabic	karne	century	kâl ^{ne}
Arabic	kasha 5/6	cupboard	likâsa 5/6, 4/4
Arabic	ku-kasinika	become angry, furious, enraged	kû-kasilika
Arabic	kasarobo	a quarter to	kasalôbo
Arabic	kasoro 9/10	defect, blemish	kasôlo 9/10, 4/4
Arabic	kasuku 1/2	parrot	kasûku 9/10, 4/4
Arabic	kasumba 9/10	opium	kasûmba 9, 4
Arabic	katani 9/10	flax, hemp, sisal fibre	katâni 9/10, 4/4
Arabic	katibu 1/2	scribe, secre- tary, writer, clerk	katîbu 1/2, 4/4
Arabic	katili 1/2	cruel person	ḡkatîli 1/2, 4/4
Arabic	ukatili 14	cruelty	ukatîli 14, 4/4
Arabic	kawaida 9	policy, normal practice	kawaîda 9, 4
Persian	kazi 9/10	work	kâsi 9/10, 4a/4a
Persian	kengele 9/10	bell	kengêli 9/10, 4/4
English	kesi 9/10	court case	kêsi 9/10, 4a/4a
Arabic	kiasi	price, measure amount, extent	kiâsi 9, 4
Persian /Arabic	kibaba 7/8	measure of cereal, flour	kibâba 7/8, 4/4
Arabic	kibali 7/8	permission, permit, written permit	kibâli 7/8, 4/4
Aramaic/ Arabic	kibiriti 7/8	match(box)	kibilîti 7/8, 4/4
Arabic	kibarua 7/8	casual labour for daily wages	kibalûa 7/8, 4/4
Persian	kiboko 7/8	hippo(potamus)	kibôko 7/8, 4/4

A	B	C	D
Arabic	kibudu 7/8	natural death (always in a bad sense, used esp. of animals dying of illness)	kibûdu 7/8, 4/4
Arabic	kiburi 7	houghtiness, arrogance, pride, conceit, ostentatiousness	kibûli 7, 4
German/ Dutch	kidachi 7	Dutch/German language	kidâchi 7, 4
Arabic	kidau 7/8	ink-pot	kidâu 7/8, 4/4
French	Ki-faransa 7	French Lg.	Kipalânza 7,4
Arabic	kifurushi 7/8	packet, small bundle, packa- ge	kipulûsi 7/8, 4/4
Hindi	kihindi 7	Hindi Lang.&ADV)	kihêindi 7, 4
(English)	Kiingereza 7	English Lan. (& ADV)	Kíngelesa 7, 3
Arabic	kilo 9/10	kilogramme	kîlo 9/10, 4a/4a
Arabic	kima 9	value, type,/ kind of value	kîma 9, 4a
Arabic	ku-kinai	be content, be self-satisfied, become nauslated	kú-kinai
Arabix	kiraka 7/8	patch, rag	kílâka 7/8, 5/5
Arabic	ku-kiri	acknowledge	kú-kili
Arabic	kisa 7/8	short-tale, story, account, report, narra- tive, explana- tion, cause, reason, justi- fication	kîsa 7/8, 4a/4a
Arabic	kisahani 7/8	small plate, saucer	kisahâni 7/8, 4/4

A	B	C	D
Arabic	kisadi 7	revenge, vengeance, retaliation	kisâsi 7, 4
Arabic	ku-kusi ku-kisia	guess estimate, approximate	kú-kisia
Arabic	Kiswahili 7	Swahili language	Kiswahîli 7, 4
Arabic	kitabu 7/8	book	kitâbu 7/8, 4/4
Arabic	kiyama 7	resurrection, 'resurrection day'(religious)	7, 4
Hindi/ Persian	kodi 9/10	tax, rent, lease, customs duly	kôdi, kôli 9/10, 5a/5a
Persian	ku-kodi	rent, lease, hire	
Persian	ku-kodisha	rent, lease, hire	kú-kodisa
Aramaic/ Arabic	kofia 9/10	hat, cap	kopîa 9/10, 4/4
Persian/ Arabic	kombora 5/6	bomb/shell	likombôla 5/6, 4/4
English	konsonanti 9/10	consonant	kónsonanti 9/10, 4/4
English	kontinenti 5/6	continent	likontinênti 5/6, 4/4
Portugues	kopo 5/6	tin	likôpu 5/6, 4/4
Arabic	Korani 9	the Koran	Kolâni 9, 4
English	koroboi 9/10	type of kerosine lamp	kolobôi kolabôi 9/10, 4/4
Portuguese	korofi	evil-minded, malignant, destructive, violet, quarrelsome, bothersome	-kolôpi

A	B	C	D
Portuguese	ukorofi 14	evil-minded, malignant, de- structive, vio- lent, quarrel- some, bother- some	ukolopi 14, 4
Portuguese	korofisha	disturb, spoil, } destroy, bother }	{ ku-kolopisa ku-kolapisa
Persian	kosa 5/6	fault, defect)	likôsa 5/6, 4/4
English	koti 5/6	coat, jacket	likôti 5/6, 4/4 kôti 9/10, 4a/4a
Arabic	kubazi 5/6	kind of sandal/shoe	likoubâsi 5/6, 4/4
Arabic	kufuli 9/10	padlock	kupûli 9/10, 4/4
Arabic	kuhani/ kohani 1/2	Jewish priest in the Bibli- cal story	kohâni 1/2, 4/4
Gujarati	kuli 1/2 PL. uli/ makuli	coolie, casual labourer	kûli 1/2
Arabic	kura	lot, vote	kûla
Arabic	ku-kusudia	intend, pro- pose, aim at, act wilfully, resolve on doing,....	kû-kusudia
Arabic	makusudi	on purpose, intentionally, deliberately, knowingly, wilfully	makusûdi
Englosh	kwinini 9/10	quinine	kwinîni 9/10, 4/4
Arabic	ladha 9/10	taste	lâsa 9/10, 4a/4a
Arabic	laini	soft, smooth	lâini
Hindi	laki 9/10	100,000	lâki 9/10, 4a/4a
Arabic	lakini	but	lakîni
Arabic	lami	tar, pitch	lâmi 9, 4a

A	B	C	D
Arabic	ku-laumu	blame	kú-laumu
Arabic	lazima	necessarily	lásima
Persian/ Arabic	limau 5/6	lemon	limâu 5/6, 4/4
Arabic	lugha 9/10	speech, language	lûga 9/10, 4a/4a
Arabic	lulu 9/10	pearl	lûlu 9/10, 4a/4a
Arabic	maalum	important, known, renowned, famous	maâlum
Arabic	maana 9	meaning	maâna 9, 4
Arabic	-a maana	of importance	-a maâna
Arabic	maarifa 6	knowledge	mahalîpa, malîpa 6, 4
Arabic	maarufu	well-known	mahalûpu
Arabic	mabakio 6	that what is left }	mabâki 'remaining payment' mabâki 6,4
Portuguese	machela 6	litter, sling for carrying person	masêla 6, 4
English	Machi	March	Mâsi/Mâchi
Arabic	madai 6	claims	malâi/madâi 6,4
Arabic	madaraka 6	arrangements repsonsibility self-resposni- bility	malalâka 6, 4
Arabic	madhura 6	calamities , losses	masâla 6, 4
Arabic	madhehebu 6	doctrine, sect, proce- dure, required	masehêbu 6, 4

A	B	C	D
Arabic	madini 6	mine, quarry, gem stone	malîni 6, 4
Arabic	Magharibi	West, where the sun sets	Magalîbi
Arabic	mahakama 6	court of jus- tice	mahakâma 6,4
Arabic	mahali	place	mahâli 6,4
Arabic	mahari 6	dowry, bri- dge-price	mahâli 6,4
Arabic	mahiri	skilful, clever, quick, dept, artful,adroit, tactful	mahîli
Arabic	mahitaji 6	needs, provi- sions	mahitâji 6, 4
English	maili 6,	mile	mâili 6, 1
Arabic	maisha 6	life	maîsa 6, 4
Arabic	maiti 9	dead body, corpse	maîti 9,4
Arabic	majadiliano 6	discussion, debate	majadiliânu 6, 4
Arabic	majaliwa 6	what is gra- nted, talents, luck, aid/help favour of God	majalîwa 6, 4
Arabic	majibizano 6	dialogue, de- bate, exchange of words	majibisâno 6,4
Arabic	majira 6	time, season, (nautical cause)	majîla 6, 4
Arabic	Ma'ka	Mecca	Mâka
Arabic	makaburi 6	burial ground	makabûli 6, 4
Arabic	makala 6	written- article, treatise	makâla 6, 4
Arabic (post, position)	makamu 1/2	vice-regent, deputy	makâmu 1/2, 4/4

A	B	C	D
Arabic	makasi (also mkasi) 6	pair of scissors	makâsi 6, 4 (usually: nkâsi 3/4, 4/4) ¹
Arabic	makini	strength of character, serenity, quiet, calm, amenable, well-behaved, gentle, composed	makîni
	esp. 'kwa makini' in a gentle, calm , dignified manner		
Arabic	makubazi 6	leather sandals	makoubâsi 6, 4
Arabic	mamlaka 6	authority	mamulâka 6, 4
Hebrew			
Aramaic	malaika 1/2	angel	malâika 1/2, 4/4
Arabic			
English	malaria	malaria fever	malâlia 6,
Persian	malaya 1/2	prostitute	(malâya) malâja 1/2, 4/4
Arabic	mali 5/6	possession, property, riches, wealth, goods	mâli 6, 4a
Arabic	mamlaka 6	authority	manâti linâti 5/6, 4/4
Arabic	manufaa 6	profit, advantage, usefulness	manupâa 6, 4
Arabic	mara 9/10	once, 'time' in the sense of repetition	mâla 9/10,
Arabic	maradhi	disease, ailment, sickness	malâsi 6, 4
Arabic	marehemu 1/2	defunct, the late	malêhêmu 1/2, 4/4

A	B	C	D
Arabic/ Persian	maridadi	well-dressed, elegant, dandy, fop, coxcomb	malidâdi malilâli
Arabic	marufuku	forbidden	malupûku
Arabic	mashaka 6	doubt	masâka 6, 4
Arabic	Mashariki	East, where the sun rises	Masalîki
English	mashine 6	machine	mâsini (5)/6,(1)/3
Arabic	mashtaka	charges, accusations, reproaches	masitâka 6, 4
Hindustani/ Gujarati	mashua 9/10	boat	masûa 9/10, 4/4
Arabic	mashuhuri	famous, re- nowned, ce- lebrated, well- known	masuhûli
Arabic	mashujaa	brave	masujâa
Arabic	masihara 6	play, jest, light matter	masihâla 6, 4
Hebrew	Masiya	The Messiah/ Christ	Masîha/Masîya 1, 4
Arabic	masikani 6	dwelling place	masikâni 6, 4
Arabic	masilahi 6	what is due	masilâhi 6, 4
Arabic	(masikini/ maskini 1/2	poor/beggar	masikîni 1/2, 4/4
Arabic	Umaskini 14	poverty	umasikîni 14, 4
Arabic	masurufu 6	provisions	masulûpu 6, 4
Arabic	Maulidi 6	Birthday celebrations (esp. of Moha- med)	Maulîdi 6. 4
Arabic	mauti 6	death	maûti 6, 4

A	B	C	D
Arabic	mbilikimo 1/2	dwarf pigmy	mbilikîmo 1/2, 4/4
Arabic	mbuni 10	coffeeberies	mbûni 10, 4a
Arabic	mdhamini 1/2	surety, tru- stee, guaran- tor, sponsor, hostage, one who goes bail for another	ṛsamîni ṛzamîni 1/2, 4/4
English	Mei	May	Mêi
English	mali 9/10	steam-ship	měli 9/10, 5a/5a
Arabic	merikebu	ship	melikêbu 9/10, 4/4
French/ English	meta 9/10	metre	mêta 9/10, 4a/4a
Arabic	methali/ mithali	likeness, proverb	mesâli
Latin/ Portuguese/ Persian	meza 9/10	table	mêsa 9/10, 2
Arabic	mfariji 1	consoler, comforter	ṛpalîji ṛfalîgi 1, 4
Arabic	mfereji 3/4	ditch, water- channel, trench dug for carrying off water/for irrigation	ṛpelêji 3/4, 4/4
Hindi	Mhindi	Indian	ṛhêindi 1/2, 4/4
Hindi	kihindi 7	Indian Lg.	kihêindi 7, 4
Arabic	mhuni 1/2	vagabound, profligate wastrel, gad- about, lawless person	ṛhûni 1/2, 4/4
Arabic	mia 9/10	(one) hundred	mîa 9/10, 4a/4a

A	B	C	D
Arabic	miadi 4	place/time of promise, promise to meet some- one	miâdi 4, 4
Arabic	mila 4	custom, habit, propensity, tra- dition usage	mîla 4, 4a
Arabic	milele	eternity, per- petuity, conti- nual, never ending	milêle(Religious)
Arabic	ku-miliki	rule, have authority over	kû-miliki
English	milioni 9/10	million	milîoni 9/10, 4/4
Arabic	mimbari 9/10	pulpit	mimbâli 9/10, 4/4
Arabic	Misri	Egypt	Mîsri
Arabic	miwani 6 or 9/10	spectacles, glasses	miwâni 6 or 9/10, 4/4
Arabic	mizani 9/10	scales, balances	misâni 9/10, 4/4
Arabic	mjeledi 3/4	whip, thong, strap	ṛzelêdi ṛzelêli 3/4, 4/4
Arabic	mkasa 3/4	case	ṛkāsa 3/4, 4/4
Arabic	mkasi 3/4. or 6	scissors	ṛkāsi 3/4, 4/4
French/ Portuguese/ English	Mkristu 1/2	Christian	ṛkrîstu 1/2, 4/4
Arabic	mnada	auction	ṛnada 3/4, 4/4
Arabic	mnaḥiki 1/2	hypocrite, liar, pre- tender, impostor	ṛnapiki 1/2, 4/4
	unafiki 14	hypocrisy, dessembling, deceit	unapîki 14, 4

A	B	C	D
Arabic	mnara 3/4	tower, steeple	ṇṇâla 3/4, 4/4
Arabic/ Persian	mnazi	coconut tree	ṇṇâsi 3/4, 4/4
	nazi 9/10	coconut	nâsi 9/10, 4a/4a
English	motaboti 9/10	motor boat	motabôti 9/10, 3/3
English	motokaa 9/10	(motor-)car, motor vehicle	mútuka 9/10, 3/3
Portuguese	mpera 3/4	guava tree	ṇṇpela 3/4, 3/3
	pera 5/6	guava	lípela 5/6, 1/3
Arabic	mraba 3/4	square	ṇṇdâba 3/4, 4a/4a
Portuguese	Mreno 1/2	Portuguese	ṇṇlênu 1/2, 4/4
Portuguese	Kireno 7	Portuguese	kilênu 7, 4 (Reino)
Arabic	msaada 3/4	help, aid assistance	ṇṇsaâda 3/4, 4/4
Arabic	msafara 3/4	caravan expedition	ṇṇsapwâla 3/4, 4/4
Arabic	msafiri 1/2	traveller	ṇṇsapîli 1/2, 4/4
Arabic	msalaba 3/4	cross, cru- cifix, sign of the cross	ṇṇsalâba 3/4, 4/4
Arabic	msaliti 1/2	betrayal, traitor	ṇṇsalîti 1/2, 4/4
Arabic	msamaha 3	forgiveness	ṇṇsamâha 3, 4
Arabic	mshahara 3/4	wage, salary	ṇṇsalaha 3/4, 1
Persian	mshenzi 1/2	savage, uncivilized person	ṇṇsênzi 1/2, 4/4
Arabic	msiba 3/4	calamity bereavement	ṇṇsîba 3/4, 4/4
Arabic	msikiti 3/4	mosque	ṇṇsikîti 3/4, 4/4
Arabic	msimu 3/4	season	ṇṇsîmu 3/4, 4a/4a
Arabic	mstari 3/4	line	ṇṇsitâli 3/4, 4/4

A	B	C	D
Arabic	mstatili 3/4	oblong(Math)	ṛstatîli 3/4, 4/4
Arabic	Mswahili 1/2	Swahili speaker	Nswahili 1/2, 4/4
Arabic	Kiswahili 7/4	Swahili language	Kiswahîli 7, 4
Arabic	msumari	nail	ṛsûmali 3/4
Arabic	mswaki 3/4	tooth-brush	ṛswâki 3/4, 4/4
Arabic	mtaa 3/4	street	ṛtâa 3/4, 4/4
Arabic	mtaalam	knowledgeable person, scholar	ṛtâlamu 1/2
Arabic	Utaalam	knowledge, scholarly work	utâlamu 14
Arabic	mtani 1/2	person treated with deep-familiarity	ṛtani 1/2, 5/5
Arabic	mtihani 3/4	examination test,	ṛtihâni 3/4, 4/4
Arabic	mtii 1/2	one who is obedient	ṛtîi 1/2, 4/4
Arabic	Utii 14	obedience	utîi 14, 4
Arabic	mtundu 1/2	mischievous/precocious child	ṛtundu 1/2, 4/4
Arabic	utundu 14	mischief	utundu 14, 4/4
Arabic	muda 3	time, moment	mûda 3, 4a
Arabic	muhtasari (mutasari)	abridgement, abstract, summary, precis	ṛtasâli 3/4, 4/4
Persian	muhuri 3/4	seal, stamp	ṛhûli 3/4, 4/4
French	musuli 9/10	muscle	mûsûli 9/10, 4/4
English	muziki 3/4	musiki	mûsiki 3/4, 3/3

A	B	C	D
Arabic	mwalimu 1/2	teacher	mwalîmu 1/2, 4/4
Arabic	Ualimu 14	teaching, education as a profession	uwalîmu 14, 4
Arabic	Mwarabu 1/2	Arab	ḡhalâbu 1/2, 4/4
	Kiarabu 7	Arabian Lg.	Kialâbu 7, 4
Hindi	mwembe 3/4	mango tree	mwêmbi 3/4, 4a/4a
Hindi	embe 9/10	mango	kiyêmbi/sêmbi (pl. yêmbi) 7/8, 4a/4a
English	Mwingereza 1/2	an Englishman	ḡgelesa 1/2, 3/3
English	Kiingereza 7	English lang.	kîngelesa 7, 3
English	Uingereza 14	England, UK.	kûngelesa 17, 3
Arabic	Mwujiza	miracle	ḡhugîsa
	Muuhiza 3/4		ḡhujîsa 3/4, 4/4
Arabic	'Myahudi 1/2	Jew/Hebrew	ḡ-yahûdi 1/2, 4/4
Arabic	Kiyahudi 7	Hebrew Lang.	kiyahûdi 7, 4
Arabic	mzaha 3/4	fun, joke	ḡsâha 3/4, 4/4
Arabic	naam	yes	nâm
Arabic	nabii 1/2	prophet	nabîi 1/2, 4/4
Arabic	nadhiri 9/10	vowing, vow, devotion, formal, oath of allegiacy	nasîli 9/10, 4/4
Arabic	nafaka 9/10	cereal, corn. in general	napwâka 10, 4
Arabic	unafiki 14	hypocrite	unapîki 14, 4
Arabic	nafasi 9/10	chance, time,...	nâpwasi 9/10, 3/3
Arabic	nafuu	better	napûu
Arabic	naibu 1/2	deputy	naîbu 1/2, 4/4
Arabic	najisi (ceremonial)	unclean	najîsi
Arabic	nakala 9/10	copy	nakâla 9/10, 4/4

A	B	C	D
Arabic	ku-nakili	copy	kú-nakili
English	namba 9/10	number	nǎmba 9/10, 5a/5a
Persian	namna 9/10	kind, specimen, sort, sample, pattern, model	námuna 9/10, 3/3
Persian	nanasi 5/6	pineapple	li-nánǎsi 5/6
Gujarati/ Persian	nanga 9/10	anchor	nānga 9/10, 4a/4a
Arabic	nasibu 1/2	luck, chance, fortune, acci- dental, occu- rrence	nasîbu 1/2, 4/4
Arabic	nauli 9/10	fare, cost of passage	naûli 9/10, 3/3
Arabic	neema 9/10	abundance, ease, blessing....	neêma 9/10, 4/4
Arabic	ngamia 1/2	camel	ngamîa 9/10, 4/4
Arabic	nia 9/10	intention, purpose	nîa 9/10, 4a/4a
English	noti 9/10	bank note, note in music	nôti 9/10, 4a/4a
English	notisi 9/10	notice, summons to court of justi- ce	nótisi 9/10, 3/3
Arabic	ku-nuia	resolve, intend, determine, wish	kú-nuia
Arabic	nukta 9/10	dot, point, mark, second of hour, full stop	núkuta 9/10, 3/3
Arabic	nusu 9/10	half	nûsu 9/10, 4a/4a

A	B	C	D
Arabic	ku-nusurika	be saved, be helped, be delivered, be almost in danger,	kú-nusulika
English	ofisa 1/2	officer	ópisa 1/2, 3/3
English	ofisi 9/10	office	ópisi 9/10, 3/3
English	Oktoba	October	Oktôba
Arabic	orodha 9/10	list, inventory	olôsa 9/10, 4/4
Arabic	orofa 9/10	upper room/ floor apartment, storey of a house	olôpa 9/10, 4/4
Portuguese	padre 1/2	priest	páti(li) 1/2, 3/3
English	paketi 9/10	packet	páketi 9/10, 3/3
Persian	pamba 9/10	cotton, lint	pâmba 9/10, 4a/4a
Hindi	papai 5/6	pawpaw fruit	li-papâi 5/6, 4/4
Hindi	pasi 9/10	iron	pâsi 9/10, 4a/4a
English	pasi(poti) 9/10	passport	pásipoti 9/10, 3/3
Persian	pazia 5/6	curtain, screen, awning	li-pasîa 5/6, 4/4
Portuguese	pera 5/6	guava	lí-pela 5/6, 1/3
Hindi	pesa 9/10	money	pěsa 10, 5a
English	petroli 9	petrol	petolôli 10, 4
English	picha 9/10	picture	pîsa 9/10, 4a/4a
Portuguese	ku-piku	win a trick at a game of cards, excel	kú-piku
Persian	pilao 9/10	dish of boiled rice cooked with ghee and raisins	pilâu 9/10, 4/4
Persian	pilipili 9/10	pepper	pilipîli 9/10, 4/4

A	B	C	D
Portuguese/ Hindi	pipa 5/6	cask, barrel, tub, butt	li-pyêipa 5/6, 4/4
English	plau 9/10	plough	pulâu 9/10, 4/4
English	pochi 9/10	pouch	pôsi 9/10, 4a/4a
English	polisi 1/2	police	pólisi 1/2, 3/3
Arabic	pori 5/6	wilderness, steppe	li-pôli 5/6, 4/4
English	posta 9/10	Post Office	pôsta 9/10, 4a/4a
Arabic	radhi 9/10	apology, pardon contentment	lâsi 9/10, 4a/4a
Arabic	radi 9/10	clap of thunder thunderbolt, lightning	lâdi 9/10, 4a/4a
Arabic	rafiki 1/2 or 9/10	friend	lapîki 1/2, 4/4
Arabic	raha 9/10	comfort, rest, repose, enjoyment, happiness, ease, bliss	lâha 9/10, 4a/4a
Arabic	rahisi	cheap, easy	lahîsi
Arabic	urahisi 14	cheapness, easiness	u-lahîsi 14, 4
Arabic	raia 1/2	citizen, sub- ject	laîa 1/2, 4/4
Arabic	Ramadhani 9	last month of the Moha- mmedan year	lamasâni 9, 4
Arabic	ramani 9/10	map, chart	lamâni 9/10, 4/4
Arabic	rambirambi 10	words of co- ndolence to bereaved people	lâmbilâmbi 10, 4
Persian	randa 9/10	carpenter's plane	lânda 9/10, 4a/4a

A	B	C	D
Persian	ku-randa	to plane	kú-landa
Hindi/ Persian	rangi 9/10	colour, paint, stain, dye, tint	lângi 9/10, 4a/4a
Arabic	ratiba 9/10	program, system	latîba 9/10, 4/4
(Arabic	taratibu 9/10	order, system, neatness, method	talatîbu 9/10, 4/4
(Arabic	taratibu	orderly, syste- matically, methodically	talatîbu)
Arabic	ratili	pound(of weight)	lâtîli 9/10, 3/3
Arabic	rejareja	retail	lejalêja
Arabic	ku-rekebisha	correct, set right	kú-lekabisa
English	reli 9/10	rail, railway track,	lêli 9/10, 4a/4a
Portuguese	M-reno 1/2	Portuguese	η-lênu 1/2, 4/4
Portuguese	Ki-reno 7	Portuguese language	Ki-lênu 7, 4
English	ripoti 5	report, account	li-pôti 5, 4
English	kuripoti	to report	kúlipoti
Arabic	risala 9/10	message	lisâla 5/6, 4/4
Arabic	risasi 9/10	bullet, sol - dier, lead	li-sâsi 5/6, 4/4
English	risiti 9/10	receipt	li-sîti 5/6, 4/4
Arabic	ku-rithi	inherit	kú-lisi
Arabic	mrithi	heir/heiress	η-dîsi 1/2, 4/4
Arabic	u-rithi	inheritance	u-lîsi 14, 4
Arabic	riziki 9/10	necessaries of life, provi- dence, desti- ny	lisîki 9/10, 4/4
Arabic	robo 9/10	quarter, a fourth part	lôbu 9/10, 4a/4a

A	B	C	D
Arabic	robota 5/6	sack, bale, bundle	li-lobôtu 5/6, 4/4
Arabic	roho 9/10	soul, spirit, life, vital principle	lôhu 9/10, 4a/4a
Arabic	uroho 14	greedliness, avarice, covetousness, gluttony	u-lôhu 14, 4
Arabic	kiroja/ kioja 7/8	addity, astoni- shing thing, curiosity, portent, bugbear	ki-hôja/ki-lôja 7/18, 4/4
Persian	roshani 9/10.	balcony, vera- ndah, proje- cting window	losâni 9/10, 4/4
Arabic	rubani 1/2	pilot, helmsman, guide	lubâni 1/2, 4/4
Arabic	rufani/ rufaa 9/10	(legal)appeal	lupâa 9/10, 4/4
Arabic	marufuku 6	prohibition	malupûku 6, 4
Arabic	ruhosa 9	permission, leave, libe- rty, holiday	luhûsa/luhûsa 11, 4
English	rula 9/10	ruler for drawing	lûla 11/10, 4a/4a
Hindi	(rupia) 9/10	Hindian Rupee	lu-pîja 'lots of money' 11, 4
Arabic	rutuba 9	fertility	lutûba 11, 4
Arabic	saa 9/10	watch, hour, clock, time	sâa 9/10, 5a/5a
Arabic	saba	seven	sâba
Arabic	sabini	seventy	sabîni
Arabic	sababu 9/10	reason, cause, motive	sabâbu 9/10, 4/4
Arabic	sabuni	soap	sabûni, 4/4

A	B	C	D
Arabic	sadaka	sacrifice, alms	salâka 9/10, 5/5
Arabic	ku-sadiki	believe	kú-sadiki
Arabic	ku-safiri	travel	kú-sapili
Arabic	safari 9/10	journey	sapwâli 9/10, 4/4
Arabic	ku-safisha	clean, clear up, purify	kú-sapisa
Arabic	safi	clean, pure, sincere, honest, clear	-sâpi
Arabic	safu 9/10	row, line, rank, series, range	-sâpu 9/10, 4a/4a
Arabic	safura 9	disease cau- sing swollen ordropsical condition	sapûla 9, 4
Arabic	sahani 9/10	plate, dish	sahâni 9/10, 4/4
Arabic	kusahani 7/8	saucer	kísahani 7/8,
Arabic	sahihi	correct, right, valid, genuine, true	sahîhi
Arabic	ku-sahihisha	correct, set right, make valid, render genuine	kú-sahisa
Arabic	msaada 3/4	help, aid	ṛ-saada 3/4, 4/4
Arabic	sakafu 9/10	floor	sakâpu 9/10, 4/4
Arabic	sala 9/10	prayer	sâla 9/10, 4a/4a
Arabic	kusali	pray to God	kúsalila
Arabic	salamu 9/10	greetings, compliments	salâmu 9/10, 4/4

A	B	C	D
Arabic	usalama 14	safety, security sound, health	usalâma 14, 4
Arabic	salama	safe, secure, of good health	salâma
Persian	sambusa 9/10	kind of cake containing meat, onion, and pepper	sambûsa 9/10, 4/4
Arabic	ku-samehe	pardon, forgive, remit, pass over (offences, debts, etc)	kû-samehe
Arabic	msamaha 3	forgiveness, pardon, remittance	ṁ-samâha 3, 4
Arabic	sana (ADV.)	very much, in high degree	sâna
Arabic	sanaa 9/10	art, work of art, skilled handcraft	sanâa 9/10, 4/4
Arabic	sanamu 9/10	statue, idol, image, likeness	sanâmu 9/10, 4/4
Arabic	sanda 9/10	shroud, burial cloth, winding sheet	sânda 9/10, 4a/4a
Arabic	sandali 9/10	sandal-wood, kind of sandals	sândali 9/10, 3/3
Arabic	sanduku 5/6	box, chest, trunk, case	li-sânduku 9/10,
Arabic	santuri 9/10	musical box, gramophone	santûli 9/10, 4/4
Arabic	saruji 9/10	concrete, cement, sand mixture	salûji 9/10, 4/4

A	B	C	D
Arabic	kisasa	modern, new, up-to-date, fashionable	kisâsa
Arabic	sawa	equally, just the same, just so, as you say	sâwa
Arabic	ku-sawazisha	level up, smoothen, make even/flat/ straight, eq- ulize	kú-sawasisa
Arabic	sebule 9/10	reception room, waiting room, courtyard	sebûli 9/10
Arabic	sehemu 9/10	part, portion, piece, share, instalment, fraction	sehêmu 9/10, 4/4
English	senti 9/10	spade, shovel	sepêtu 9/10, 4/4
English	Septemba	September	Seputêmba
Persian/ Arabic	(m)seremala 1/2	carpenter	ṣ-selemala 1/2, 4/4
Persian/ Arabic	useremala 14	carpentry	u-selemala 14, 4
Persian	serikali 9/10	government, public autho- rity, official rulers	sélikali/sílikali 9/10, 3/3
English/ Portuguese	seti 9/10	set	seti 9/10, 5a/5a
Arabic	shabaha 9/10	target, aim, mark	sabâha 9/10, 4/4
Arabic	shahada 9/10	certificate, attestation, evidence, proof	sahâda 9/10, 4/4
Arabic	shahidi 1/2	witness, martyr	sahîdi 1/2, 4/4
Arabic	ushahidi 14	witness, martyrdom	u-sahîdi 14, 4

A	B	C	D
Arabic	shairi 5/6	poetry, poem	li-sahîli 5/6, 4/4
Arabic	shaka 5/6	doubt, perple- xity, uncertain- nty	li-sâka 5/6, 4/4
French	shamba 5/6	plantation, farm, estate, field	lí-samba 5/6, 1/1
French	ushamba 14	country-like, not knowledge- able of urban ways	u-sâmba 14, 4
English	shati 5/6	shirt	li-sâti 5/6, 4/4
Arabic	shauri 5/6	advice, cou- sel, discus- sion, legal debate, court case	li-sâuli 5/6,
Arabic	halmashauri 9/10	committee, advisory, cou- ncil of counse- llors/advisors	halumasá(h)uli 9/10
Arabic	kushauri	advise, counsel	kú-sauli
Arabic	ku-shawishi	persuade, coax, allure, entice, tempt	kú-sawisi
Arabic	shela 9/10	veil worn over the head	sêla 9/10, 4a/4a
Arabic	shemasi	deacon	semâsi 1/2, 4/4
Arabic	ushemasi 14	deaconate	u-semâsi 14, 4
Persian	shenzi	barbarous, uncivilized uncouth, savage	u-sênzi 14, 4
Persian	mshenzi 1/2	savage, barba- rian	ñ-sênzi 1/2, 4/4
Arabic	sherehe 9/10	festival, cele- bration, rejoy- cings	selêhe 9/10, 4/4

A	B	C	D
Arabic	sheria 9/10	law, rule, litigation	sel [^] ta 9/10, 4/4
Arabic	shetani 1/2	devil, satan, spirit, demon	li-set [^] ani 5/6, 4/4
Arabic	ku-shibisha	feed, satisfy, fill out the stomach	k ^u -sibisa
Arabic	shida 9/10	difficulty, hardship, di- stress	s ⁱ da 9/10, 4a/4a
Arabic	shilingi 9/10	shilling	s ⁱ lingi 9/10, 3/3
Arabic	shirika 5/6	company, association, communion	lisil ⁱ ka 5/6, 4/4
Arabic	ushirika 14	cooperation	u-sil ⁱ ka 14, 4
Arabic	ku-shtaki	accusely, charge, com- palin of, pro- secute	k ^u -sitaki
Arabic	mashtaka 6	accusations, charges, pro- secution, re- proaches	masit ^a ka 6, 4
Arabic	shughuli	business, occu- pation, engage- ment	sug ^u li 9/10, 4/4
Arabic	shuka 5/6	bed-sheet	li-s ^u ka 5/6, 6/5
Arabic	ku-shukuru	thank, be grateful, give thanks	k ^u -sukulu
Arabic	shukrani 9/10	thanks, grati- tude, thanks- giving	sukul ^a ni 9/10, 4/4
German	shule	school	s ^u li 9/10, 4a/4a
Arabic	ku-shurutisha	compel, oblige, force,	k ^u -sulutisa

A	B	C	D
Arabic	shwari	calm(of weather)	swâli
Arabic	siagi 9/10	butter, cream	siâgi 9/10, 4/4
Arabic	siasa 9/10	politics, order- liness, gentle- ness, careful- ness	siâsa 9/10, 4/4
Arabic	sidiria 9/10	bra	sindilîa 9/10, 4/4
Arabic	sifa 9/10	praise, comme- ndation, flattery, applause, repu- tation, fame	sîpa 9/10, 4a/4a
Arabic	ku-sifu	praise	kú-sipu
Arabic	sifuri 9/10	zero, nought, a cipher	sipûli/sipûlu 9/10, 4/4
English	sigareti 9/10	cigarette	sigalêti 9/10, 4/4
Persian	siki	vinegar	sîki 9/10, 4a/4a
English	silabi 9/10	syllable	silâbi 9/10, 4
Arabic	silaha 9/10	weapon, arms	silâha 9/10, 4/4
Persian	simu 9/10	telephone, tele- graph, telegram, telegraphic mes- sage	sîmu 9/10, 4a/4a
Arabic	ku-simulia	narrate, relate, report, given an account of, tell a story	kú-simulia/kú-simulila
English	sinema 9/10	cinema	sínema 9/10, 3/3
Arabic	sinia	tray	li-sinîa 5/6, 4/4
Arabic	siri	secret, my- stery, puzzle	sîli 9/20, 4a/4a
Arabic	sita	six	sîta
Arabic	sitini	sixty	sitîni
Arabic	kusitawi/ kustawi	flourish, be in full swing, prosper	kú-sitawi
English	skrubu 9/4	screw	sukulûbu 9/10, 4/4

A	B	C	D
Arabic	soko 5/6	market	li-sôku 5/6, 4/4
English	soksi 9/10	socks/sto- ckings	sókisi 9/10, 3/3
Arabic	ustadi 14	skill, expert- ness	usitâdi 14, 4
Arabic	kustahili	merit, deserve, kú-sitahili be fitting, be proper, be due	
Arabic	kukabidhi	entrust	kú-kabisi
Arabic	stakabadhi 9/10	receipt	sitakabâsi 9/10, 4/4
Arabic	kustarehe	enjoy oneself	kú-sitalehe
English	stimu 9	electricity	sitîmu 9, 4
Arabic	sufuria 9/10	metal cooking pot	supulîa 9/10, 4/4
	usukani 14	steering wheel	usukâni 14, 4
Arabic/ Chinese	sukari 9	sugar	sukâli 9, 4
Arabic	kusulubu/ kusulubisha	crucify	kú-sulubisa
Arabic	msalaba 3/4	crucifix, cross	ñ-salâba 3/4 , 4/4
Arabic	sultani 1/2	sultan, ruler, king, chief	sulutâni 1/2, 4/4
Arabic	kusuluhisha	reconcile, pacify, bring about peace	kú-suluhisha
Arabic	msuluhishi	peace-maker, reconcillor	ñ-suluhîsi 1/2, 4/4
Arabic	sumaku 9/10	magnet	sumâku 9/10, 4/4
Arabic	sumu 9/10	poison	sûmu 9/10, 4a/4a
Arabic	sura 9/10	face, form, look, appea- rance, expre- ssion, likeness, chapter, gene- ral view	sûla 9/10, 4a/4a

A	B	C	D
Arabic	ki-swahili 7	Swahili Lg.	Ki-swahili 7, 4
Arabic	m-swahili 1/2	Swahili person	N-swahili 1/2, 4/4
Arabic	swali 5/6	question, inquiry, interrogation, problem	li-swâli
Arabic	kutaabika	be troubled, be in distress, become anxious/fatigued	kú-taabika
Arabic	taabu 9/10	distress, trouble, anxiety	taâbu 9/10, 4/4
Arabic	taarifa 9/10	news, information, news-cast inform	taalîpa 9/10, 4/4
Arabic	ku-tarifu	inform	kú-alipu
Arabic	tabaka 5/6	layer, row, statum, stage, level	li-tabâka 5/6, 4/4
Arabic	tabia 9/10	character, behaviour, habit, nature, disposition	tabîa 9/10, 4/4
Arabic	tafrija 9/10	entertainment	tapalîja 9/10, 4/4
Arabic	tafsiri 9/10	interpretation translation	tapasîli 9/10, 4/4
Arabic	kutafsiri	interpret, translate	kú-tapasili/kú-pwasili
Arabic	ku-tahiri	circumcise	kú-tahili
Arabic	taifa 5/6	nation, state	li-taîpa 5/6, 4/4
Arabic	taji 5/6	crown, coronet	li-tâji 5/6, 4/4
Arabic	tajiri	wealthy, rich	tajîli
Arabic	tajiri 1/2	rich/wealth person	tajîli 1/2, 4/4
Arabic	u-tajiri 14	richness, wealth	u-tajîli 14, 4
Arabic	takwimu 10	statistics	takwîmu 10, 4

A	B	C	D
Arabic	talaka 9/10	divorce	talâka 9/10, 4/4
Arabic	kutalii	tour, inquire	kú-talihi
Arabic	u-talii 14	tourism	u-talîi 14, 4
Arabic	mtalii 1/2	tourist	ṇ-talîi 1/2, 4/4
Arabic	utamaduni 14	culture, civilization	u-tamadûni/u-tamalûni 14, 4
Arabic	kutamani	desire, long for, covet, want, like, lust after	kú-tamani
Arabic	tangi 5/6	tank for sto- ring water	li-tângi 5/6, 4/4
English	tani 9/10	ton	tâni 9/10, 4a/4a
Arabic	kutania	treat with deep familia- rity as though one of very near kin, treat in a jocular manner	kú-tania
Arabic	utani 14	treatment of deep familia- rity	útâni 14, 5
Arabic	mtani 1/2	one who is treated with deep famili- arity	ṇ-tâni 1/2, 5/5
German	-	slate board	tâpeli 9/10, 3/3
Arabic	tarafa 9/10	administrative division, part of an ared	talâpa 9/10, 4/4
Arabic	kutarajia	hope for, hope to do	kú-talajia
Arabic	tarakimu 9/10	written figure, numeral	talakîmu 9/10, 4/4
Arabic	taratibu 9	order, progra- mme to be followed	talatîbu 9, 4

A	B	C	D
Arabic	tareje 9/10	date	talêhe 9/10, 4/4
Arabic	tarishi 1/2	messenger, postman, courier, swift runner	talîshi 1/2, 4/4
English/ Portuguese	tarumbeta 9/10	trumpet	talumbêta 9/10, 4/4
Arabic	tasa 1/2	barren	tâsa 1/2, 4a/4a
Arabic (cf. CB *-tat- 'tieng')	matata 6	problems, difficulty, mess, perplexity	ma-tâta 6, 4
Arabic (cf. CB *-tat- 'tieng')	tatizo	problem, compli- cation, difficulty	li-tatîsu 5/6, 4/4
Arabic	kutawala	govern, admini- strate, rule over, reign	u-tawâla 14, 4
Arabic	mtawala 1/2	ruler, admini- strator	ñ-tawâla 1/2, 4/4
Arabic	kutawaza	set on the throne, instal as a ruler/chief, celebrate the coronation of	kú-tawasa
Persian/ Hindi	tayari	ready, prepared, at hand	tayâli
Arabic	thamani 9	value, price, estimation of precious ob- ject	samâni 9, 4
Arabic	kuthamini	to consider as being precious	kú-samini
Arabic	thelathini	thirty	selasîni
Arabic	themanini	eighty	semanîni
Arabic	thumuni 9/10	half a shiling	súmuni 9/10, 3/3

A	B	C	D
Arabic	ku-thibitisha	prove, confirm, secure, make firm, establish	kú-sibitisa
Arabic	kithibiti	proof, evidence	ki-sibîti 7/8, 4/4
Arabic	kuthubutu	dare, venture, have courage to	kú-subutu
Arabic	kutibu	treat medically, attend to professionally, cure, heal	kú-tibu
Arabic	utabibu 14	medical practice, science of healing	u-tabîbu 14, 4
Arabic	matibabu 6	medical treatment, doctoring	ma-tibâbu 6, 4
Arabic	kutii	obey	kú-tii
Arabic	utii 14	obedience	u-tîi 14, 4
Arabic	mtii 1/2	obedient person	ḡ-tîi 1/2, 4/4
English	tikiti 9/10	ticket	tíkiti 9/10, 3/3
Arabic	timamu	complete, sound, whole (of brains, mental efficiency)	timâmu
Arabic	kutimia	become complete (in number required)	kú-timia
Arabic	tisa	nine	tîsa
Arabic	tisini	ninety	tisaîni
Arabic	ubeti 14/10	verse, stanza, strophe (in poetry)	u-bêti 14/?, 4/4
Arabic	ubikira 14	virginity	u-bikîla 14, 4
Arabic	bikira 1/2	virgin	bikîla 1/2, 4/4
Arabic	kuudhi	annoy, vex, grieve, harass, give trouble, pain	kú-usi

A	B	C	D
Arabic	udhia 14	trouble, bother, disturbance, difficulty, annyance	usîa 14, 4
Arabic	Ujamaa 14	Socialism	U-jamâa 14, 4
Arabic	ujajusi 14	espionage	u-jasûsu 14, 4
Arabic	ujira	payment for work	ujîla 14, 4
Arabic	Ulaya 9	Europe	Ku-Ulâja 17, 4
Arabic	umri 14	age	ú-mli 14, 3
Arabic	ushaidi 14	witness, evidence	u-saîdi 14, 4
Arabic	usafi 14	cleanliness	u-sâpi 14, 4
Arabic	ushuru 14	taxation, custom duty	u-sûlu 14, 4
Arabic	mizani 9/10	scales, balance for weighting	misâni 9/10, 4/4
English	volcano 9/10	volcano	polukânu 9/10, 4/4
English	vokali 9/10	vowel	pokâli 9/10, 4/4
Arabic	kuwahi	be in time, be prompt/punctual, be ready to act	kú-wahi
Arabic	wajibu 3	duty, obligation	wajîbu 3, 4
Arabic	wakili 1/2	agent, representative, commissioner, barrier	wakîli 1/2, 4/4
Arabic 'appoint agent'	kuwakilisha	represent	kú-wakilisa
Arabic	wakati 3	time	wakâti 3, 4
Arabic	wakia 9/10	ounce	wakîa 9/10, 4/4

A	B	C	D
Arabic	wala	nor, neither	wâla
Arabic	wali 9	cooked rice	wâli 9, 4a
Arabic	Wallahi	by God!	walâhi
Arabic	waraka 3/10	written commu- nication, docu- ment, letter	walâka 3/10, 4/4
Arabic	wasia/usia/ wosia 14	last will, solemn charge, warning, exhortation	usîa 14, 4
Arabic	kuwasili	arrive, reach destination, be delivered/rece- ived	kû-wasili
Arabic	wasiwasi 3	disquiet, anxiety, doubt, perplexity	wasiwâsi 3, 4
Arabic	wastani	average, middling, moderate, medium, between extremes	wasitâni 3, 4
Arabic	waziri 1/2	minister(of state)	wasîli 1/2, 4/4
Arabic	uwaziri 14	office of Minister (of state)	u-wasîli 14, 4
English	wiki 9/10	week	wîki 9/10, 4a/4a
Arabic	wilaya 9/10	district, area	wilâya 9/10, 4/4
Arabic	wino 9	ink	wînu 9, 4a
English	yadi 9/10	yard	yâdi 9/10, 4a/4a
Arabic	Yahudi 1/2	Jew, Hebrew	ḡ-yahûdi 1/2, 4/4
Arabic	Kiyahudi 7	Jewish Lang.	Kiyahûdi 7, 4
Arabic	yatima 1/2	orphan	yatîma 1/2, 4/4
Portuguese/ Hindi	yaya 1/2	child's nurse, nanny, baby- minder, baby- sitter	yâya 1/2, 4a/4a
Arabic	Zabibu 10	grapes, raisin	sabîbu 10, 4

A	B	C	D
Arabic	mzabibu 3/4	grape vine	ṇ-sabîbu 3/4, 4/4
Arabic	zaburi 9/10	psalm, psalter	sabûli 9/10, 4/4
Arabic	zaka 9/10	offering for religious purposes	sāka 9/10, 5a/5a
Arabic	zamani 9/10	past time/epoch/period, in the past	samâni 9/10, 4/4
Arabic	zamu 9/10	turn, shift, period of duty	sâmu 9/10, 4a/4a
Arabic	zana 9/10	weapons, gadgets, fitting, apparatus	sâna 9/10, 5a/5a
Arabic	zawadi 9/10	present, gift, keepsake	sawâli 9/10, 4/4
Arabic	ziara 9/10	visit, pilgrimage	siâla 9/10, 4/4
Arabic	kuzidi	increase, excel, outstrip, outdo	kú-sidi
Arabic	kuzidisha	multiply, increase	kú-sidisa
Arabic	kizidiwa	become overcome	kú-sidiwa
Arabic	kuzini	commit adultery/ fornication	kú-sini
Arabic	kuzirai	faint, swoon	kú-silahi
Arabic	zulia 5/6	carpet	li-sulîa 5/6, 4/4
Arabic	kuzuru	visit, make a pilgrimage	kú-sulu

Appendix Iib

LIST OF SWAHILI WORDS OF CONTROVERSIAL ORIGIN

<u>English Gloss</u>	<u>Swahili</u>	<u>Zawawi 1979</u>	<u>Guthrie 1967/71 (CB)</u>
war	vita	(< Arabic, pg. 48)	C.S. 151 *-bìtá 'war'
bead	ushanga	šanqq (pg. 124)	291 *-cángá 'bead'
songs	nyimbo	(< Arabic, pg. 55)	2010 *-yímbo 'song'
broom	mfagio	(< Arabic, pg. 55)	1509 *-piágid- 'sweep'
time	wakati	waqt 'time' (pg. 124)	ps 285 *-kátí 'time'
waterskin	kiriba	(< Arabic, pg. 57)	C.S. 557 *-dìbà 'pool'
cat	paka	(< Arabic, pg. 73)	1420 *-pákà 'cat'
wife	mke	n-keh 'marry' (pg. 121)	1022 *-ké 'wife'
guest/ visitor	mgeni	ejnib/egnib 'strange' (pg. 121)	805 *-gèñì 'stranger'
farmer	mkulima	lilm 'heap/collect' (pg. 122)	568 *-dìlm- 'cultivate'
thief	mwizi	lišš 'thief' (pg. 122)	2025 *-yí[b] 'thief'
pigeon	njiwa	jiwral 'pigeon' (pg. 122)	939 *-jìbà 'pigeon'
goat	mbuzi	buuz 'muzzle' (pg. 122)	185 *-búdì 'goat'
youth	kijana	anaam 'person' (pg. 122)	1922 *-yána 'child'
human being/ created	kiumbe	unbà 'create' (pg. 122)	199 *-búmb-/ -búúmb- 'mould / pottery'
chicken	kuku	quuq 'cackling sound' (pg. 123)	1203x *-kúkù/ 1203y *-kúkú 'chicken'
fire	moto	mođđ 'burning' (pg. 124)	2138 *-yótò 'fire'
mountain	mlima	lilm 'heap/ collect' (pg. 124)	569 *-dìlà 'hill'
heart	moyo	oyn 'source' (pg. 124)	2144 *-yòyò 'heart'
leg	mguu	rguul/rjuul 'leg' (pg. 124)	884 *-gùdù 'leg'
millet	mtama	ṭā'am / ṭā'am 'food/ taste' (pg. 124)	ps. 427 *-tāmà 'kaffir corn / sorghum'
cooked rice	wali	waliim 'feast' (pg. 124)	C.S. 765 *-gādì 'mush'
clothing	nguo	gulho / julho 'garment' (pg. 124)	873 *-gùbò 'cloth'

<u>English Gloss</u>	<u>Swahili</u>	<u>Zawawi 1979</u>	<u>Guthrie 1967/71 (CB)</u>
hunger	njaa	jaa ^c 'hungry' (pg. 125)	C.S. 917 *-jàdà 'hunger/famine'
house	nyumba	unba ⁷ 'create/build' (pg. 125)	2168 *-nyũmbá 'house'
chest	kifua	qifuṣ 'thorax' (pg. 125)	1258 *-kúba 'chest'
well	kisima	siima 'landmark/sign' (pg. 125)	353 *-cĩmà 'well'
cup	kikombe	qā ^c be 'coconut shell' (pg. 125)	1139 *-kómbe 'cup'
ashes	jivu	jjiff 'ashes' (pg. 125)	216 *-bú 'ashes'
leaf	jani	jani 'to pick up/rake in' (pg. 125)	1928 *-yanì 'leaf/grass'
sun	jua	jjuuw/jjaww 'sky/atmosphere' (pg. 125)	2149 *-yúbà 'sun'
stone	jiwe	wecr 'rock' (pg. 125)	176 *-bùè 'stone'
eye	jicho	iṭoof 'extinguish light' (pg. 126)	2030 *-y{cò 'eye'
name	jina	ṣiin 'identify' (pg. 126)	2068 *-yínà 'name'

APPENDIX III

Common Bantu Tonal Reflexes in Matengo (N 13)

1. *-HL

<u>CE</u>	<u>English</u> <u>Gloss</u>	<u>N 13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-cǐmbà	lion	lí-himba 5	x							
	lions	má-himba 6		x						
*-bánjà	courtyard	lú-banza 11		x						
		kí-banza 7		x						
	courtyards	í-banza 8		x						
*-bídl	two	-beili	x							
*-bókò	arm/hand	kú-boku 15/17		x						
	arms/hands	má-boku 6		x						
*-búdl	goat	ím-buhi 9	x							
	goats	ím-buhi 10/8	x							
*-búnù	waist	kí-bunu 7		x						
	waists	í-bunu 8		x						
*-búda	rain	í-hula 9	x							
*-cábl	witchcraft	ú-habi 14		x						
	witch	ǵ-habi 1		x						
	witches	á-habi 2		x						
*-tátù	three	-tatu	x							
*-cónì	shame/shyness	í-honi 8	x							
*-cúbì	leopard/tiger	kí-houbi 7		x						
	leopards/tigers	í-houbi 8		x						
*-cúpa	bottle	sǔpa 7							x	
	bottles	hyǔpa 8							x	
	bottle	li-sǔpa 5								x
	bottles	má-sǔpa 6						x		
*-díml	tongue	lú-limi 11		x						
	the swelling of the uvula(disease)	kí-limi 7		x						
	-do-(plural)	í-limi 8		x						

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-dǐbà	milk	má-siba 6			x					
*-dǐngò	load/burden	ń-sigu 3			x					
	loads/burdens	mí-sigu 4			x					
*-dǐmù	spirit	n-sǐmu 3				x				
	spirits	mi-sǐmu 4				x				
*-dǐmè/	husband	ń-doumi 1			x					
*-dǐmì	husbands	(áka-)á-loumi 2			x					
*-yǐkò	fire-place	li-jǐku 5				x				
	fire-places	ma-jǐku 6				x				
*-gǐnà/	name	li-hǐna 5								x
*-yǐnà	names	má-hǐna 6						x		
*-jímbo	song	lú-jeimbu 11			x					
	songs	nyéimbu 10/8		x						
*-jókà	snake	lí-joka 5	x							
	snakes	má-joka 6			x					
*-yúbà	sun/day	ly-óuba 5		x						
	days	má-souba 6			x					
*-kútà/	oil	má-huta 6			x					
*-gútà										
*-kádì	acidity/fierceness	ú-kali 14			x					
*-kándà	strap	u-kànda 14				x				
		ń-kànda 3				x				
	straps	mi-kànda 4				x				
*-kídà	tail	ń-keilla 3			x					
	tails	mí-keilla 4			x					
*-kǐnà/	base of tree trunk	li-hǐna 5				x				
*-tǐnà	bases of tree trunks	ma-hǐna 6				x				
*-kǐngò	neck	hǐngo 9		x						
	necks	hǐngo 10		x						
*-kóbà	(leather) bag	ń-koba 3			x					
	(leather) bags	mí-koba 4			x					

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-kócì	friend	ŋ-kôsi 1				x				
'chief'	friends	(áka-)a-kôsi 2				x				
*-kódò	clanship	lú-kolu 11						x		
*-kóko	crust	u-kôku 14				x				
	crusts	ma-kôku 6				x				
*-kómbe	cup	ki-kômbi 7				x				
	cups	i-kômbi 8				x				
*-kóndò	fight/war	ngôndu 9		x						
	fight/wars	ngôndu 10		x						
*-kúmi	ten	kôumi							x	
*-kúmi	unit of ten	lí-koumi 5	x							
	units of ten	má-koumi 6			x					
*-kúndè	bean	lú-koundi 11			x					
	beans	ngôundi 10		x						
*-mónò	castor oil	í-monu 10/8	x							
	castor oil bean	lú-monu 11	x							
	castor oil beans	í-monu 10/8	x							
	castor oil plant	ŋ-monu 3	x							
	castor oil plants	mí-monu 4	x							
*-páca	twins	má-páha 6						x		
*-pánjà	bald head	lu-pânza 11				x				
	bald heads	mbânza 10					x			
*-pàngà	bush knife	u-pânga 14				x				
	bush knives	mi-pânga 4				x				
*-pídì	puff-adder	lí-peili 5	x							
	puff-adders	má-peili 6			x					
*-pínì	handle	ŋ-pini 3			x					
	handles	mí-pini 4			x					
*-píngò	ebony tree	ŋ-peingu 3			x					
	ebony trees	mí-peingu 4			x					
*-pída	pus	ú-híla 14						x		

<u>OB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-píga	cooking stone	lí-higa 5	x							
	cooking stones	má-higa 6			x					
*-pódì	quietness/calm	u-pôli 14				x				
*-púkù	kind of rat	ím-bouku 9	x							
	-do-(pl.)	ím-bouku 10	x							
*-púkù	bag	ń-puku 3			x					
	bags	mí-puku 4			x					
*-tádà	platform	kí-tala 7			x					
	platforms	í-tala 8			x					
*-tádì	length/distance	u-táli 14				x				
*-takò	buttock	lí-taku 5	x							
	buttocks	má-taku 6			x					
*-tégò	trap	ń-tegu 3			x					
	traps	mí-tegu 4			x					
*-tètè	reed	lí-teti 5	x							
	reeds	má-teti 6			x					
*-títù	forest/thicket	ń-situ 3	x							
	forests/thickets	mí-situ 4	x							
*-tóngà	stick	lú-ndõnga 11						x		
	sticks	ndõnga 10							x	
	stick	ndõnga 9							x	
	sticks	ndõnga 10							x	
*-yàkà	year	mw-âka 3		x						
	years	my-âka 4		x						
*-yána	child	mw-âna 1		x						
	children	b-âna 2		x						
*-yátò	canoe	w-âtu 3		x						
	canoes	w-âtu 4		x						
*-yáyù	yawning	mw-âju 3		x						
	'yawnings'	my-âju 4		x						

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N 13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-yéḍì	moon/month	mw-êhi 3		x						
	moons/months	my-ehi 4		x						
*-yídì	darkness	lw-îhi 11		x						
*-yícò	eye	l-îhu 5		x						
	eyes	m-îhu 6		x						
*-yíḅì	thief	mw-îhi 1		x						
	thieves	b-îhi 2		x						
*-yínò	tooth	l-înu 5		x						
	teeth	m-înu 6		x						
*-yínyù	salt	mw-înyu 3		x						
*-yótò	fire	mw-ôtu 3		x						
	fires	my-ôtu 4		x						
*-yúma	iron/bead	s-ôuma 7		x						
	(pieces of iron)	hy-ôuma 8		x						
*-yúmì	live	-ôumi		x						
	life	w-ôumi		x						

2. *-LL

*-bààgò	adze, axe	lí-bagu 5	x							
	adzes, axes	má-bagu 6	x		x					
*-bàno	shaft	mí-banu 3	x							
	shafts	mí-banu 4	x							
*-bèlì	elder brother	mí-beli 1	x							
'first born'	elder brothers	(áka-)á-beli 2	x							
*-bègà	shoulder	lí-bega 5	x							
	shoulders	má-bega 6			x					
*-càngà	sand/grain	ḡ-sânga 3				x				
	sand grains	mi-sânga 4				x				

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-cèkò	laughter	lú-heku 11	x							
	'laughters'	í-heku 8								
		or 10	x							
*-tántò	bridge	ń-tandu 3	x							
	bridges	mí-tandu 4	x							
*-cèngà	grain/kind									
	of soft porridge	lú-sěnga 11						x		
	grains	sěnga 10							x	
*-dàpò	oath	kí-lapu 7	x							
	oaths	í-lapu 8	x							
*-dèdù	beard (sing)	lú-lehu /								
		lú-ndehu 11			x					
	beard (plur)	ín-dehu 10	x							
*-dèdù	chin	kí-lehu 7			x					
	chins	í-lehu 8			x					
*-dìbà	pool/water									
	place	ki-líba 7				x				
	pools/water									
	places	i-líba 8				x				
*-dèngè	calabash bottle									
	'pumpkin'	ki-lèngi 7				x				
		li-lèngi 5				x				
	calabash bottles									
		i-lèngi 8				x				
		ma-lèngi 6				x				
*-dìdò	mourning	kí-leilu 7	x							
	-do-(Plur)	í-leilu 8	x							
*-dìmbà	xylophone/									
	hand piano	kí-limba 7	x							
		lí-limba 5	x							
	xylophones/									
	hand pianos	í-limba 8	x							
		má-limba 6	x							

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-dìbò	stopper	kí-hibu 7	x							
	stoppers	í-hibu 8	x							
*-dìngà	bee-hive	ń-singa 3	x							
	bee-hives	mí-singa 4	x							
*-dìngà	cannon	ń-singa 3	x							
	cannons	mí-singa 4	x							
*-gùbò	cloth	ín-goubu 9	x							
	clothes	ín-goubu 10	x							
*-gùdù	leg/foot	kú-goulù 17 or 15	x							
	legs/feet	má-goulù 6	x							
*-gùndà	field/garden	ń-gounda 3	x							
	fields/gardens	mí-gounda 4	x							
*-jàdà	hunger/famine	ín-zala 9	x							
	-do-(Plur)	ín-zala 10	x							
*-kìpà	vein/tendon									
	nerve	ń-sìpa 3			x	x				
		ń-hìpa 3				x				
	-do-(Plur)	mi-sìpa 4				x				
		mi-hìpa 4				x				
*-mùdì	torch	lú-mulì 11	x							
	torches	í-mulì 8 or 10	x							
*-nèà	abdomen									
	below the navel	lú-nèà 11	x							
	-do-(Plur)	í-nèà 8	x							
		or 10	x							
*-nòkù	flesh	ń-nohu 3	x							
	pieces of flesh	mí-nohu 4	x							
*-nyàà	meat	ínyama 9	x							
	pieces of meat	ínyama 10	x							

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-yòngò	bile	nyôngu 9		x						
	biles	nyôngu 10		x						
*-gùdù	attic	li-gôulu 5				x				
'top'	attics	ma-gôulu 6				x				
*-pimò	measure	kí-peimu 7	x							
	measures	í-peimu 8	x							
*-pòkù	blind person	ki-pôfu 1				x				
*-pùdò	nose	ím-bulu 9	x							
	noses	ím-bulu 10	x							
*-pùkù/	mole	ki-húku 7				x				
*-pùkò	moles	i-húku 8				x				
*-tumbà	bag/parcel	ń-tumba 3	x							
	heap									
	-do-(Plur)	mí-tumba 4	x							
*-tumbù/	abdomen	lú-tumbu 11	x							
*-tumbò	abdomens/									
	intestines	má-tumbu 6	x							
*-dòmò	mouth/lip	ń-domu 3	x							
	mouths/lips	mí-lomu 4	x							
*-dòndà	wound/sore	kí-londa 7	x							
	wounds/sores	í-londa 8	x							
*-dòngò	kinship	ú-longu 14	x							
*-dùmbù	sister	ń-doumbu 1	x							
	sisters	(áka-)á-loumbu 2	x							
*-dùndè	cloud	lí-hundi 5	x							
	clouds	má-hundi 6	x							
*-gàdì	mush/									
	porridge	ú-(g)wali 14	x							
*-gambò	affair/									
	court-case	lí-gambu 5	x							
	-do-(Plur)	má-gambu 6	x							

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-gànjà	palm of hand	kí-ganza 7	x							
	palms of hand	í-ganza 8	x							
*-gàngà	medicine man	ḡ-ganga 1	x							
	medicine men	(áka-)á-ganga 2	x							
*-gèdà	hoe	lí-gela 5	x							
	hoes	má-gela 6	x							
*-gèṇì	stranger/ visitor	ḡ-geni 1	x							
	strangers/ visitors	á-geni 2	x							
*-yèndò	speed/pace	mw-èndu 3							x	
	'journey'									
	-do-(Plur)	my-èndu 4							x	
*-dìdà	path/way	in-déila 9				x				
	paths/ways	in-déila 10				x				
*-ḡòmà	drum	ḡoma 9	x							
	drums	ḡoma 10	x							
*-ḡòmbè	cow/cattle	ḡômbi 9		x						
	cows/cattle	ḡômbi 10		x						
*-gòngò	back	ḡ-gongu 3	x							
	backs	mí-gongu 4	x							
*-yùnì	bird	kí-juni 7	x							
	birds	í-juni 8	x							
*-yùndò	hammer	nyûndu 9		x						
	hammers	nyûndu 10		x						
*-yàmbò	bait	nyâmbu 9		x						
	baits	nyâmbu 10		x						
*-yògà	mushroom	bw-ôga 3		x						
*-yòyò	heart	mw-ôju 3		x						
	hearts	my-ôju 4		x						

3. *-LH

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-bìgá	pot	ki-beîga 7				x				
	pots	i-beîga 8				x				
*-bìdí	two	-beilli	x							
*-bòngó	brain	u-bôngu 14				x				
*-bùngú	caterpillar/ maggot	li-bôngu 5				x				
	-do-(Plur)	ma-bôngu 6				x				
*-dùmbá	smell	lú-humba 11	x							
*-gòyí	string/rope	ŋ-goji 3	x							
		lú-góji 11	x							
	strings/ropes	mí-goji 4	x							
*-gògò	log	li-gôgu 5				x				
	logs	ma-gôgu 6				x				
*-gùmbí	dust	lu-hóumbi 11				x				
	-do-(Plur)	ma-hóumbi 6				x				
*-kàté	bread	ŋ-kâti 3				x				
	-do-(Plur)	mi-kâti 4				x				
*-kàtí	inside	ŋ-kâti 18				x				
*-nyàngá	blowing horn	nyânga 9		x						
	blowing horns	nyânga 10		x						
*-nyùmbá	house	nyúmba 9				x				
	houses	nyúmba 10				x				
*-yù má	back/rea	kú-nyuma 17	x							
*-pàká	boundary	m-pâka 3				x				
	boundaries	mi-pâka 4				x				
*-pàndé	piece	ki-pândi 7				x				
	pieces	i-pândi 8				x				
*-pòngó	he-goat	li-pôngu 5				x				
	he-goats	ma-pôngu 6				x				

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-pùngá	rice	mí-pounga 3	x							
	-do-(Plur)	mí-pounga 4	x							
*-tìkí	stump of tree	ki-héiki 7				x				
	stumps of trees	i-héiki 8				x				
*-tòdú	navel	lú-tohu 11			x					
	navels	í-tohu 8 or 10			x					
*-tùngá	basket	kí-toŭnga 7						x		
	baskets	í-toŭnga 8						x		
*-yadá	flat rock/ grinding stone	lw-âla 11					x			
*-yadí	girl	ka-mw-âli 1				x				
	girls	áka-ka-mw-âli 2				x				
*-yadí	blood	mw-âhi 3					x			
	-do-(Plur)	my-âhi 4					x			
*-yání	ape	li-jâni 5				x				
	apes	ma-jâni 6				x				
*-yânjá	lake	nyânza 9					x			
(OSC. *+HL/ *-LL)	lakes	nyânza 10					x			
*-yátí	grass	lí-nyăhi 5								x
	grasses	má-nyăhi 6						x		

4. *-HH

*-béyú/	seed/pip	ím-beju 9	x
*-bégu		ím-begu 9	x
	seeds/pips	ím-beju 10	x
		ím-begu 10	x
*-dámú	brother/sister- in-law	ń-dămu / á-lămu 1	
	-do-(Plur)	(áka-)á-lămu 2	x

<u>CB</u>	<u>English</u> <u>Gloss</u>	<u>N13 & NC</u>	<u>TC1</u>	<u>TC2</u>	<u>TC3</u>	<u>TC4</u>	<u>TC4a</u>	<u>TC5</u>	<u>TC5a</u>	<u>TC6</u>
*-dúdí	shadow/ shade	kí-hwǎli 7						x		
		ǵ-hwǎli 3						x		
	shadows/ shades	í-hwǎli 8						x		
		mí-hwǎli 4						x		
*-címá	well/spring	ki-sîma 7				x				
	wells/springs	i-sîma 8				x				
*-kǵé	eye-brows	i-hǵi 8				x				
*-kúkú	chicken/hen	ín-gouku 9	x							
	chicken/hens	ín-gouku 10	x							
*-kópé	eye-lash	lú-ngopi 11			x					
	eye-lashes	íngopi 10 or 8	x							
*-kúnda	pigeon	ngûnda 9					x			
	pigeons	ngûnda 10				x	x			
*-pémhá	millet (stalk)	lí-pemba 5	x							
	millet (stalks)	má-pemba 6			x					
*-pété	ring	pěti 9							x	
	rings	pěti 10							x	
*-púngá	rice	ǵ-pounga 3	x							
	-do-(Plur)	mí-pounga 4	x							
*-púté	boil	lí-puti 5	x							
	boils	má-puti 6	x		x					
*-témbó	elephant	nděmbu 9						x		
	elephants	nděmbu 10						x		
*-túdí	mortar for pounding	lí-touli 5	x							
	-do-(Plur)	má-touli 6			x					
*-túmbí	egg	lí-hóumbi 5								x
	eggs	má-hóumbi 6						x		
*-dúdí	whistling	lú-louhi 11			x					
	-do-(Plur)	í-louhi 8 or 10			x					

APPENDIX IV

Common Bantu Tonal Reflexes in Manda (N 11)

1. *-HL

CB	English Gloss	N 11	Noun Class(es)	Tone Class(es)
*-bá [́] njà	courtyard	lú [́] v [́] anja	11/10	A
*-bókò	arm/hand	kú [́] woko	7/8	A
*-bónò	castor oil	mô [́] no	9	C
*-bónò	castor oil plant	m̃ [́] -mono	3/4	A
*-bónò	castor oil bean	mô [́] no	9/10	C
*-bú [́] à	dog	lî [́] bwa	5/6	C
*-bú [́] dî	goat	mbû [́] hi	9/10	C
*-búnù	waist/groins	kî [́] wunu	7/8	A
*-bú [́] dà	rain	fû [́] ra	9	C
*-cà [́] tù	python	lî [́] satu	5/6	A
*-cî [́] mbà	lion	lî [́] himba	5/6	A
*-côn [́]	shame/shyness	sôn [́] i/hôn [́] i	9	C
*-cúbî	leopard	lî [́] souvi	5/6	A
*-dí [́] mî	tongue	lú [́] limi	11	A
*-dí [́] gò	bundle/load	m̃ [́] sighu	3/4	A
*-gî [́] nà/ *-yî [́] nà	name	lî [́] hîna	5/6	B
*-gú [́] tà/ *-kú [́] tà	oil	má [́] futa/má [́] huta	5/6	A
*-jî [́] bà	kind of pigeon	njeî [́] wa	9/10	C
*-jú [́] kî	bee	njû [́] chi	9/10	C
*-ká [́] dî	acidity/fierceness	úk [́] ali	14	A
*-ká [́] nda	strap	ŋ [́] -kanda	3/4	A
*-kî [́] dà	tail	ŋ [́] -keila	3/4	A
*-kî [́] mù	stupidity	ú [́] himu	14	A

CB	English Gloss	N 11	Noun Class(es)	Tone Class(es)
*-kínà/ *-tínà	base of tree trunk	lísina	5/6	A
*-kíngò	neck	síngu	9/10	C
*-kóndò	war/fight	ngôndo	9/10	C
*-kúbù/ *-kúgù	navel	ń-kufu	3/4	A
*-kúkù	chicket	ngókou	9/10	C
*-kúndè	bean	lungôundi	11/10	B & C
*-kúndò	knot	lifûndu	5/6	B
*-kúpà	bone	lífupa/líhupa	5/6	A
*-pàcà	twin	lípasa/lípaha	5/6	A
*-pàkà	(domestic)cat	lipâka	5/6	B
*-pàngò	cave	lipângu	5/6	B
*-pépò	wind/col. weather	mbêpu	9	C
*-pída	pus	máfila/máhila	6	A
*-pígà	cooking stone	lífiga	5/6	A
*-pígò	kidney	fígu	5/6	C
*-púkò	bag	mfuku	3/4	A
*-púngù	kind of eagle	kápoungu/ lipoûngu	12/6 or 5/6	A & B
*-táda	platform	lútala/kítala	11/8 or 7/8	A
*-tádi	length	útali	14	A
*-takò	buttock	lídaku	5/6	A
*-táma	cheek	lítama	5/6	A
*-tégo	trap/snare	ńtegu	3/4	A
*-tété	reed	lídete	5/6	A
*-títù	forest	ńsitu	3/4	A
*-tóngà	stick	ndônga	9/10	C
*-yàkà	year	mwâka	3/4	C
*-yàna	child	mwâna	1/2	C
*-yàtò	cause	wâtu	14/10	C

CB	English Gloss	N 11	Noun Class(es)	Tone Class(es)
*-yéḁì	moon/month	mwése	3/4	C
*-yíḁò	eye	líhu	5/6	C
*-yígùà	thorn	mwíḁwa/ mwíḁa	3/4	C
*-yímì	stinginess	unyími	14	B
*-yímbò	song	lwéímbu	11/10	C
*-yínò	tooth	línu	5/6	C
*-yínyù	salt	mwínyu	3	C
*-yókà	snake	líyoka	5/6	A
*-yóngò/ *-nyóngò	bile	nyôngo	9	C
*-yótò	fire	môto	3/4	C
*-yúbà	sun	lyôḁuḁa	5	C
*-yúbà	day	líjouḁa/ lichouḁa	5/6	A
*-yúma	iron	chôḁma/ kyôḁma	7/8	C
*-yúngu	pumpkin	lyôḁngou	5/6	C

2. *LL

*-bàagò	axe	líḁagu	5/6	B
*-bààjò	adze	mbāju	9/10	C
*-bàḁù	rib/side of the body	líḁafu	11/10	A
*-bègà	shoulder	líḁega	5/6	A
*-bìḁì	body	míḁeilei	3/4	A
*-bìgà	pot	kíḁeiga	7/8	A
*-bùnù	nose	mbûnu	9/10	C
*-càngà	sand/beach	ḁsànga/mhânga	3/4	B
*-cèkò	laughter	luhêku	11	B

CB	English Gloss	Noun Class(es)	N 11	Tone Class(es)
*-kìpà	vein	ńsipa	3/4	A
*-cìngà	cannon	ńzinga	3/4	A
*-cìngà	beehive	ńzinga	3/4	A
*-cùdì	gravy/broth	ńchuzi	3/4	A
*-dàpò	oath	kílapu	7/8	A
*-dègè	bird	lídege kádege	5/6 12/13	A
*-diàngò	door	ńdyângu	3/4	B
*-dìbò	stopper	kizîbu	7/8	B
*-dìdù	mourning	kíleilu	7/8	A
*-dìpò	payment	máleipu	6	A
*-dìma	hill	ńdeima	3/4	A
*-dìmbà	xylophone/ hand piano	kílimba	7/8	A
*-dìmbù	bird-lime	léimbu	3	C
*-dòmò	mouth/lip	ńdomo	3/4	A
*-dòndà	wound/sore	kilônda	7/8	B
*-dùbà	flower	lílouva	5/6	A
*-dùmbù	sister	ndôumbou	1/2	C
*-dùndè	cloud	lifûndi	5/6	B
*-gàbò	shield	ngâu	9/10	C
*-gàngà	medicine man	ngânga	1/2	C/B
*-gànjà	palm of hand	kigânja	7/8	B
*-gèdà	hoe	liyêla	5/6	B
*-gòngò	back	ngôngo	3/4	C
*-gòyì	rope/string	ńgoyi/lúgoyi	3/4 or 11/4	A
*-gùbà	bellows	ńfuva	3/4	A
*-gùdù	leg/foot	chígoulou	7/8	A
*-gùinà	crocodile	lingwîna/ lihwîna	5/6	B
*-jàdà	famine/hunger	ńjâla	9/10	C

CB	English Gloss	Noun Class(es)	N 11	Tone Class(es)
*-jìdà	path/way	ndêila	9/10	C
*-kàtì	inside	ṁgati	18	A
*-kùìkùì	hiccups	kingwêiku	7/8	B
*-mùdì	torch	kímulì	7/8	A
*-nyàmà	animal	línyama	5/6	A
*-nyàmà	meat	nyâma	9/10	C
*-nyòkò	mother	nyôko	1/2	C
*-nyùndù	hammer	nyûndu	9/10	C
*-ṁòma	drum	ṁôma	9/10	C
*-ṁòmbè	cattle/cow	ṁômbi	9/10	C
*-pìmò	measure	kípêimu	7/8	B
*-pòkù	blind person	kípôfu	1/2	B
*-pùngù	wind	ṁpôungou	3/4	B
*-tàbì	branch	línafi	5/6	A
*-tàngà	cucumber	litânga	5/6	B
*-tântò	bridge	ṁtându	3/4	B
*-tòokè	banana	litôki	5/6	B
*-tùmbù	stomach	lutûmbu	5/6	B
*-yàmbù	bait	nyâmbu	9/10	C
*-yàyù	foot print/sole	lwayu	11/10	C
*-yìcì	pestle	mŵisi	3/4	C
*-yìnà	mother	nyîna	1/2	C
*-yògà	fear	wôga	14	C
*-yòyò	heart	môyo	3/4	C
*-yùnì	bird	káyuni	12/13	A

3. *-LH

*-bìgá	pot	kiŵêiga	7/8	B
*-bòdà	bee-sting	luwôla	11/10	B
*-bùngú	caterpillar	liwôungou	5/6	B

CB	English Gloss	Noun Classes	N 11	Tone Class(es)
*-càná	day	líchana	5/6	A
*-càno	wife	mhána	1/2	B
*-cèngí	(kind of) rat	líchenje	5/6	A
*-cùngú	whiteman	ńsougou	1/2	A
*-dàngí	bamboo	ndási	3/4	B
*-gùmbí	dust	lufûmbi	11/6	B
*-kùtú	ear	líkutu	5/6	A
*-mène	goat	mêne	9/10	C
*-nùngú	porcupine	nûngu	9/10	C
*-nyumba	house	nyûmba	9/10	C
*-pandé	piece	kipândi	7/8	B
*-yací	blood	mwâsi	3/4	C
*-yání	ape	líyani	5/6	A
*-yumba	room	chûmba	7/8	C

4. *-HH

*-béyú	seed	mbêyu	9/10	C
*-cábí	witchcraft	úhavi	14	A
*-cómba	fish	sômba	9/10	C
*-dámú	brother/sister in law	ń-damu	1/2	A
*-déma	(state of being a) cripple)	ki-lêma	7/8	B
*-díba	well, pool	líliba	5/6	A
*-dúdí/ *-dídí	shadow	kihŵíli/ kifwíli	7/8	B
*-gápí/ *-ngápí	paddle	ngáfi	9/10	C
*-kópe	eye-lash	ngôpi/ngôpi	9/10	C

CB	English Gloss	Noun Class(es)	N 11	Tone Class(es)
*-kúkú(OSC)	chicken	ngôuku	9/10	C
*-pádá	bald head	kípara	7/8	A
*-pémhá	millet stalk	lípemba	5/6	A
*-péte	ring	pét	9/10	C
*-púte	boil	líputi	5/6	A
*-túá	bush-dweller	mûtwá	1/2	C
*-túlí	mortar	lítouli	5/6	A
*-túmbí	egg	líhoumbi	5/6	A
*-yátí(OSc.)	buffalo	njâti	9/10	C
*-yénjé	(kind of) beetle	kíyenje	7/8	A
*-yóyó	heart	mwôyo	3/4	C
*-yúcí	river	lôusi	9/10	C

APPENDIX V

Common Bantu Tonal Reflexes in Ngoni (N 12)

1. *-HL

CB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-béédè	breast, milk, udder	livêle	5/6	II
*-bókò	arm, hand	chíwoko	7/6,	I
		káwoko	12/8	= do =
*-bódò	penis	líbolo	5/6	I
*-bónì	pupil of the eye	mbôni	9/10	III
*-búà	dog	líbwa	5/6	III
*-búdá	rain	fúra / fûla	9	III
*-búnù	waist	chíwunu	7/8	I
*-cáádì	arrow	mshâle	3/4	II
*-cátù	python	líhatu	5/6	I
*-cím̩bà	lion	líhimba	5/6	I
*-códì	tear from the eye	líholi / lísoli	5/6	I
*-cón̩ì	shame, shyness	sòni	9	III
*-cúbì	leopard	chíhuvi	7/8	I
*-díbà	milk	mazíwa	6	II
*-dóótò	dream	ndôto	9/10	III
*-gínà	name	lihîna	5/6	II
*-gútà/ *-kútà	oil	máhuta	6	I
*-jíbà	(kind of) pigeon	lijíva	5/6	II
*-kááyà	home village	kukâya / pakâya	17 or 16	II
*-kádì	fierceness	úkali	14	I
*-kídà	tail	m̩kila	3/4	I

CB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-kínà / *-tínà	base of tree trunk	líhina	5/6	I
		chíhina	7/8	= do =
*-kíngò	neck	síngu	9/10	III
*-kócì	chief	ṛkôsi	1/2	II
*-kódò	kinship	lúkolo	11/10	I
*-kómbè	cup	chikômbi	7/8	II
*-kóndò	war, fight	ngôndo	9/10	III
*-koópì	slap	likôfi	5/6	II
*-kúà	dead person	ṛfwa	1/2	I
*-kúápà	arm-pit	ngwâpa	9/10	III
*-kúbà	chest	chifûa	7/8	II
*-kúkù	chicken	ngûku	9/10	III
*-kúndò	knot	chifûndu	7/6	II
		lihûndu	5/6	= do =
*-kúpà	bone	líhupa	5/6	I
*-mónò	castor oil	môno	9	III
*-pácà	twins	mápasa	6	I
*-pákà	cat	pâka	1/2	III
*-pángò	cave	lipângo	5/6	II
*-pépò	cold weather	mêpu / mbêpu	9	III
*-pídà	pus	máhila / máfila	6	I
*-pígà	cooking-stone	lífiga / líhiga	5/6	I
*-pígù	kidney	chifigu	7/6	II
		lifigu	5/6	= do =
*-pódù	foam	pôfu - mapôfu	5/6	III & II
*-tádì	length	útali	14	I
*-takò	buttock	lídaku	5/6	I
*-táma	cheek	lítama	5/6	I
*-tégo	trap, snare	ṛtegu	3/4	I
*-tètè	reed	lídete	5/6	I
*-tíma	heart	ṛtima	3/4	I

CB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-títù	forest	m̂ŝitu	3/4	II
*-tóngà	stick	ndônga	9/10	III
*-yábu	nest	ŵavu	14/10	III
*-yákà	year	mŵaka	3/4	III
*-yànà	child	mŵana	1/2	III
*-yánjà	lake	nŷanja	9/10	III
*-yàtì	buffalo	líyati	5/6	I
*-yáyù	yawning	mwayu	3/4	III
*-yédi̱	month / moon	mwêzi	3/4	III
*-yíbi̱	thief	mŵihi		III
*-yícò	eye	líhu	5/6	III
*-yínò	tooth	línu	5/6	III
*-yínyù	salt	mŵinyu	3	III
*-yókà	snake	líyoka	5/6	I
*-yókì̱	smoke	lŷosi	5	III
*-yótà	thirst	nŷota	9	III
*-yótò	fire	m̂oto	3	III
*-yúba	sun	lŷuva	5	III
*-yúkì̱	bee	lúnjuchi - nĵuchi	11/10	I & III

2. *-LL

*-bààjò	adze	mb̂aju	9/10	III
*-bàdà	garden	lívala	5/6	I
*-bàḏy̱	side of body, rib	lúvahu - mb̂ahu	11/10	I & III
*-bèbà	kind of rat	mb̂eva	9/10	III
*-bègà	shoulder	líbega	5/6	I
*-bìdì	body	m̂vili	3/4	I
*-bìgà	pot	chíviga	7/8	I
*-bìmbì	(sea-) wave	liŵimbi	5/6	II
*-cùḏi̱	broth, gravy	m̂cĥûzi	3/4	II

CB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-dàpò	oath	chilâpu	7/8	II
*-dègè	bird	chídege	7/8	I
*-diàngò	door, doorway	mlyângu	3/4	II
*-dibà	well, spring	líliwa	5/6	I
*-dìbò	stopper	chizibu	7/8	II
*-dìdò	mourning	máliku	6	I
*-dìmbà	hand-piano, xylophone	lilimba	5/6	II
*-dìmbò	bird-lime	ulimbu	14	II
*-dìngà	cannon	mzinga	3/4	II
*-dìpò	payment	malipo	6	II
*-dòmò	mouth, lip	m'lomo	3/4	I
*-dòndà	sore, wound	chílonda	7/8	I
*-dubà	flower	liúwa	5/6	II
*-dùndè	cloud	li hùndi	5/6	II
*-gàngà	medicine man, doctor	m'ganga	1/2	II
*-gànjà	palm of hand	chigânja	7/8	II
*-gèlà	hoe	lígela	5/6	I
*-gègò	molar tooth	ligêgo	5/6	II
*-gèni	stranger, visitor	m'geni	1/2	I
*-gìdò	taboo	m'hilu	3/4	I
*-gòdò	yesterday	gôlo	-	III
*-gònò	fish-trap	m'gono	3/4	I
*-gùdù	leg	chigûlu	7/8	II
*-gùinà	crocodile	ligwina	5/6	II
*-jàdà	hunger, famine	njâla	9	III
*-jìdà	path, way	njîla	9/10	III
*-kìpà	vein, tendon	m'sipa / m'shipa	3/4	I
*-kùikùì	hiccup	chingwiku	7/8	II
*-mùdì	torch	chímuli	7/8	I
*-nènà	abdomen below the navel	chínena	7/8	I
*-nòkù	flesh, piece of steak	m'nohu, m'nofu	3/4	I

OB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-nyîna	mother	nyîna	1/2	III
*-ŋômbè	cow, cattle	ŋômbi	9/10	III
*-pòkù	blind person	chipôfu	1/2	II
*-tàbì	branch	litâwi	5/6	II
*-tàkà	soil	lúdaka	11	I
*-tântò	bridge	mtandu	3/4	I
*-tèètè	grass-hopper	lidède	5/6	II
*-tùngò	civet cat	chíhungu	7/8	I
		líhungu	5/6	= do =
*-yàmà	meat	nyâma	9/10	III
*-yàmbò	bait	nyâmbu	9/10	III
*-yàyò	sole of foot, footprint	lwâyù	11/10	III
*-yòngò	bile	nyôngù	9/10	III
*-yùndò	hammer	nyûndu	9/10	III
*-yùni	bird	chíyuni	7/8	I

3. *-LH

*-bôngó	brain	ubôngù	11	II
*-bùngú	caterpillar	liwûngu	5/6	II
*-cùngú	whiteman	ṁzungu	1/2	I
*-dàngí	bamboo	ṁlâhi	3/4	II
*-dìndí	pit	lilîndi	5/6	II
*-kàté	bread	ṁkâte	3/4	II
*-katí	inside	ṁgati	18	I
*-kùadé	kind of partridge	likwâli	5/6	II
*-kùngú	fog	likûngu	5/6	II
*-nyumba	house	nyûmba	9/10	III
*-páká	boundary	ṁpaka	3/4	I

CB	English Gloss	N 12	Noun Class(es)	Tone Class(es)
*-pàndé	piece	chipândi	7/8	II
*-tàaté	father	dâdi	1/2	III
*-tòdú	navel, umbilical cord	chitôfu	7/8	II
*-yâdí	blood	mwâhi	9/10	III
*-yâdí	girl	kamwâli	1/2	II
*-yâní	kind of ape	líyani	5/6	I

4. *-HH

*-béyú	seed	mbêyu	9/10	III
*-cábí	witch	m̃havi	1/2	I
	witchcraft	úhavi	14	= do =
*-cécé	spark	lichêche	5/6	II
-címá/-tímá	spring, water-place	chisîma	7/8	II
*-cómá	fish	sômba / hômba	9/10	III
*-dámú	brother-/sister-in-law	m̃lamu	1/2	I
*-dóótó	dream	ndôto	9/10	III
*-dúdí	shadow, shade	chíhuli	14	I
*-jáyí	egg	liyâyi	5/6	II
*-júdí	(body-) hair	njwîli	10	III
*-kááte	bread	m̃kâte	3/4	II
*-kéédó	morning	lukêla	11	II
*-pádá	baldness, bald head	chípala	7/8	I
*-pémá	millet	mápemba	6	I
*-pété	ring	pête	9/10	III
*-púté	boil, swelling	líputi	5/6	I
*-témbo	elephant	ndêmbu	9/10	III
*-túdí	mortar for pounding	lítuli	5/6	I
*-yénjé	kind of cricket	chíyenje	7/8	I

Appendix VI

Tone and Nominal Class : The Case of NC 5

<u>Matengo</u>	<u>Gloss</u>	<u>Tone Class(es)</u>
lí-banga	scar	1/1
lí-bagu	axe, adze	1/3
li-băta	duck	6/5
li-bâsi	bus	4/4
lí-beli	breast, mother's milk	1/3
lí-bega	shoulder	1/3
li-bêmbi	fly	4/4
lí-beigi	stable, pen, cow-shed	1/3
lí-beindi	valley	1/3
lí-bondu	flesh, piece of steak	1/3
li-bôma	garrison, dancing troupe	4/4
li-bôti	boat	4/4
li-bômba	pipe	4/4
li-bôndi	valley	4/4
li-bûndi	heap (of food)	4/4
í-li-bu	stone	1/1
li-boŭmba	pit, big hole	6/5
li-boŭngu	caterpillar	4/4
li-bwěha	fox, jackal	6/5
li-gâli	car, motor vehicle	4/4
lí-gambu	affair, court case	1/1
lí-gela	hoe	1/1
li-gôga	resentment, ill-feeling	4/4
li-gôgu	log	4/4
li-gôulu	attic	4/4
li-hâmu	shame, shyness	4/4
lí-hamba	leaf	1/1
lí-hatu	python, puff-adder	1/1
li-hêma	tent	4/4

<u>Matengo</u>	<u>Gloss</u>	<u>Tone Class(es)</u>
lí-hengu	work, piece of work, job	1/1
lí-hebi	all-weather farm	1/3
lí-higa	cooking stone, hearth-stone	1/3
li-hĩna	name	6/5
li-hĩna	base of tree trunk	4/4
lí-himba	lion	1/3
lí-himbi	root of the taro plant	1/3
li-hĩnda	measure of corn for pounding in mortar	6/5
lí-hoka	spirit (of the dead)	1/3 or 1/1
li-hõna	tobacco	4/4
li-hõtu	small hole, opening	6/5
li-hõumbi	egg	6/5
lí-huku	type of wild fruit	1/1
lí-hundi	cloud	1/1
li-hũndu	knot	6/5
lí-hupa	bone	1/3
lí-jabu	cassava (plant/root/leaf)	1/1
li-jãni	ape, monkey	4/4
lí-jela / lí-gela	hoe	1/1
li-jêsi	army	4/4
li-jĩbu	answer, response	4/4
li-jĩku	fire-place, kitchen, cooker	4/4
li-jĩni	fairy, genie, spirit, demon	4/4
lí-joka	snake	1/3
li-jõula	bark of tree	6/5
lí-junzu	hair (on the head)	1/1
lí-kandu	mud	1/1
li-kãsa	cupboard, chest	4/4
lí-keni	line (of holes) for planting seeds	1/3 or 1/1
lí-kenya	crack in foot	1/3
li-kẽmba	pit	4/4

<u>Matengo</u>	<u>Gloss</u>	<u>Tone Class(es)</u>
lí-keilu	latrine	1/3 or 1/1
lí-keinda	tuft of grass	1/3
lí-kili	strength (usually: ma-kili)	1/1
li-kólu	vegetable	6/5
li-kôlu	cave	4/4
li-kôpi	slap, box on the ear	4/4
li-kôpu	tin - can	4/4
li-kôsa	fault, mistake, defect	4/4
li-kôti	shirt, coat, over-coat	4/4
lí-koungu	fog	1/3 or 1/1
li-kûli	rat, mouse	4/4
li-kûnda	type of dancing (for women)	4/4
lí-kungu	kind of food	1/3 or 1/1
li-kûtu	ear	4/4
li-lâbi	ground-nut, pea-nut	4/4
li-lêbi	big tin-can of four gallons	4/4
li-lengi	calabash 'bottle'	4/4
li-lêni	debt	4/4
lí-lobi	word, view, opinion, affair	1/3
li-lôli	looking glass, mirror	4/4
lí-louba	flower (of fruit-bearing tree)	1/3
li-lûka	shop, store	4/4
lí-mani (also: lí-imani)	liver	1/1 (pl. í-mani)
lí-mbanga	crow	1/1
li-mbangu	gap (esp. between hills)	6/5
lí-nau (also: li-inau)	kind of vegetable	1/1 (pl. í-nau)
li-ndambi	branch of tree	6/5
li-ndîmu	lemon	4/4
li-ndoutu	pop-corn	4/4
li-nzeigi	crab	6/5

<u>Matengo</u>	<u>Gloss</u>	<u>Tone Class(es)</u>
li-nz ^ˇ ondi	pebble, kind of game for young girls	6/5
li- ^ˇ gwĩna	crocodile	6/5
li-ny ^ˇ ahi	grass	6/5
li-p ^ˆ ahi	grass-hopper	4/4
li-p ^ˆ angu	cave	4/4
li-p ^ˆ ehi	stalk of maize/millet	4/4
lí-pela	guava	1/3
lí-pemba	millet	1/3
lí-peili	adder, puff-adder	1/3 or 1/1
li-pe ^ˆ isi	piece of calabash	4/4
lí-pondu	kind of pumpkin	1/3 or 1/1
li-p ^ˆ ongu	he-goat	4/4
lí-pounda	ass, horse	1/3 or 1/1
li-p ^ˆ ula	gall-bladder, baloon	4/4
lí-puti	boil, swelling	1/3 or 1/1
li-p ^ˇ undwa	hyena	6/5
lí-pwani	kind of vegetable	1/3 or 1/1
li-py ^ˆ anda	deep sorrow	4/4
li-s ^ˆ aka	doubt	4/4
li-s ^ˆ ali	fermenting beer	4/4
lí-samba	farm, field	1/1
li-s ^ˆ apu	male sexual organ	4/4
li-s ^ˆ asi	bullet, lead, solder	4/4
li-s ^ˆ ati	shirt	4/4
li-s ^ˆ enzi	tangerine	4/4
li-s ^ˆ omba	sun-flower	4/4
lí-souba (also: ly- ^ˆ ouba	day	1/3
li-s ^ˇ uka	bed-shit	6/5
lí-sundu	kind of partridge	1/3

<u>Matengo</u>	<u>Gloss</u>	<u>Tone Class(es)</u>
li-sûngwa	orange	4/4
li-sûpa	bottle	6/5 (see 5.1.8.)
li-tâji	crown	4/4
lí-taku	buttock	1/3
lí-tanda	pool of water	1/3
li-tânga	door	4/4
lí-tanga	cucumber	1/3
lí-tengu	dense forest	1/3
lí-teti	reed	1/3
li-tôki	banana (plant/fruit/leaf)	4/4
li-tôndu	drop (of liquid)	4/4
li-tôngi	small ball of corn food	4/4
lí-tonzi	cotton wool	1/1
lí-touli	mortar for pounding	1/3 or 1/1
li-tôundu	abuse, swear word	4/4
li-tûbi	(wrapped) parcel	6/5
li-tûhi	farm, garden	4/4
lí-tuku	cheek	1/1
li-tûlu	non-intoxicating beverage, soft beer	4/4
lí-tunda	fruit	1/3
li-ûwa, li-(h)ûha	flower	4/4

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